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THE UNIVERSITY OF ALBERTA

ATTITUDES OF KENYAN OCCUPATIONAL  
THERAPISTS TOWARD THERAPEUTIC ACTIVITIES

by



PETER MUCHIRI NGATIA

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH  
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THE UNIVERSITY OF ALBERTA  
FACULTY OF GRADUATE STUDIES AND RESEARCH

The undersigned certify that they have read, and  
recommend to the Faculty of Graduate Studies and Research,  
for acceptance, a thesis entitled Attitudes of Kenyan  
Occupational Therapists Toward Therapeutic Activities  
submitted by Peter Muchiri Ngatia, in partial fulfilment of  
the requirements for the degree of Master of Education.



## ABSTRACT

The specific purpose of this exploratory and descriptive study was to identify Kenyan occupational therapists' attitude toward therapeutic activities as a form of medical treatment for patients with physical and/or psychosocial dysfunctions. Five subproblems and hypotheses were advanced to help resolve the specific problem satisfactorily.

Data for this study were collected by means of a research questionnaire developed by the researcher. Copies of this research instrument were mailed to Nairobi (Kenya) where they were administered to the 68 occupational therapists who were engaged in occupational therapy practice at the time of the study, who comprised this population. Forty three (63.2%) usable questionnaires were returned and analyzed for the purposes of this study.

The findings of this study indicated that occupational therapists in the Republic of Kenya possessed a positive attitude toward therapeutic activities. Relationships between their (occupational therapists') attitude and their age and years of experience were found to be positive, weak, but statistically significant. The relationships between treatment, evaluation, and consultation roles were found to be negative, weak, and statistically insignificant. And finally, there was a positive but weak relationship



between the attitudes of an occupational therapist and the teaching, administration/supervision, clinical supervision, and research roles. These relationships were also statistically insignificant.

Differences in attitude toward therapeutic activities between male and female, and urban and rural occupational therapists were noted. They were, however, found to be statistically insignificant.

On the basis of the above research findings, conclusions and implications of this study were formulated. Recommendations were made to the various constituencies of occupational therapy, i.e. occupational therapy educators, administrators, Kenya Occupational Therapy Association, and the Ministry of Health (Kenya).



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## CHAPTER I

### INTRODUCTION

The definition of occupational therapy identifies therapeutic activities as the tools of operation for occupational therapists. If the term "occupational therapy" is analyzed by examining the two words that make up this professional title, it becomes more apparent that the profession would not be what it is without these activities. Reed and Sanderson (1980) analyzed the professional title "occupational therapy" in the following way:

"To occupy" a verb; "occupation" a noun; and "therapy," a noun . . . . To occupy means to fill up or take up time or space and to engage, employ or busy oneself. Occupation means an activity or something in which one engages. Therapy means treatment of illness or disability through the analysis and use of occupations which fill up a person's time and space, and engage the individual in activity. (p. 1)

The significance of therapeutic activities is also found in the definitions of occupational therapy. The definitions identify therapeutic activities as the sole instrument or tools operationalized by occupational therapists in order to accomplish treatment objectives. A cursory examination of some definitions would help clarify this assertion further.

Pattison (1922) described occupational therapy as "any activity, mental or physical, definitely prescribed and



guided for the distinct purpose of contributing to and hastening recovery from disease or injury" (Reed and Sanderson, p. 2). Hall (1923) stated that "Occupational therapy provides light work under medical supervision for the benefit of patients convalescing in hospitals or in their homes" (Reed et al., p. 2). The definition of occupational therapy by Harworth and Macdonald (1949) is more encompassing than any of the previous definitions. These authors wrote:

Occupational therapy is a medical discipline which utilizes work, recreational activity, or self-help activities for the distinct purpose of contributing to and hastening recovery from disease and injury. (p. 1)

This definition appears more explicit and encompassing in that it does not only identify the uniqueness of the profession and its use of therapeutic activities but also identifies other important concepts that are basic to occupational therapy. Reed et al. (1980) summarized these concepts in this way:

1. Occupations (activities) can be mental and/or physical in nature.
2. Occupational therapy should be ordered or written (prescribed).
3. One purpose of occupational therapy is to contribute to or hasten recovery from injury or disease.
4. Occupational therapy assists in the development and recovery of occupational (task) skills.
5. Occupational therapy involves the total person.
6. Occupational therapy has a scientific rationale.
7. Occupational therapy tasks and activities can be analyzed and selected according to known criteria. (p. 3)



In further discussing these definitions, Reed et al. also delineated some concepts that are erroneously associated with occupational therapy. These authors have taken the position that:

1. Occupational therapy should not be used as a means of keeping a person busy with no other objective in mind. It is not busy work.
2. Occupational therapy does not teach specific job skills or provide selected vocational training for industrial workers.
3. Occupational therapy does not provide an employment service for unemployed workers.
4. Occupational therapy should not be unplanned, haphazard program of activities.  
(p. 3)

It can be observed from the above discussion that activities are only said to be therapeutic if their contributions to the clients of occupational therapy are purely curative or rehabilitative in nature.

There are various ways of classifying therapeutic activities. The categorization of these activities by Mcdonald (1970) seems to be more systematic and logical than what was attempted by others. Consequently Macdonald's taxonomy is more popular than the others.

Mcdonald categorized therapeutic activities into five major classifications:

1. Personal activities of daily living.
2. Expressive and creative activities.
3. Intellectual and educational activities.
4. Industrial and vocational activities.
5. Recreational activities. (p. 23)

For the purpose of this study, no attempt was made to differentiate between the activities that comprise each of these five classifications. Instead, all activities in the five classifications were treated under the generic heading of "therapeutic activities."



So far this report has demonstrated the importance of therapeutic activities to the profession of occupational therapy and the emphasis authors of the professional literature place on this aspect of the profession. However, these professionals totally ignore the attitudes that occupational therapists have toward therapeutic activities as their media of treatment. This subject seems to be treated with tacit approval and/or disapproval by members of this profession.

The writer, a trained occupational therapist in both Kenya and Canada, is aware from past experience that therapeutic activities are often received with very mixed feelings. In spite of the emphasis given to these activities in the preparation of occupational therapists, the investigator has observed that practising occupational therapists are not truly enthusiastic about using them in treating patients. Some patients, too, are reticent in performing therapeutic activities. The major reason for this attitude was discussed by the writer in a paper submitted to the Department of Occupational Therapy (University of Alberta). The writer stated:

In a developing country like Kenya, occupational therapy is still a myth to many people. The society completely fails to understand how work can be done in a hospital setting where rest has been emphasized therebefore. The male patients fail to understand why they should do 'basketry' which is looked upon as a feminine craft. The female patients, on the other hand, cannot see themselves hammering or sawing wood, as it is considered a male occupation. (p. 2)

How does this affect the practitioners of occupational



therapy? There is no doubt that occupational therapists experiencing this kind of negative reaction may perceive themselves and their profession in a distorted manner. Such negative experiences may develop negative feelings toward these activities and may eventually lead to formation of negative attitudes toward the same. This assentation is yet to be documented in the literature of occupational therapy. The literature does, however, reveal existence of three implicit groups of occupational therapists in relation to therapeutic activities.

The first group consists of occupational therapists who portray a tendency to be hesitant in utilizing therapeutic activities for the treatment of patients with physical and/or psychosocial dysfunctions. The other group consists of occupational thereapists who would rather use anything else to accomplish treatment and/or rehabilitative goals than therapeutic activities. The third group is comprised of professional loyalists who continue to uphold the traditional view that therapeutic activities and the profession of occupational therapy are completely inseperable, and any treatment techniques adopted in occupational therapy should only be used to complement therapeutic activities. In what group do the occupational therapists practising in the Republic of Kenya belong? A research investigation needs to be completed to explore the attitudes of Kenyan occupational therapists toward therapeutic activities as a form of medical treatment for physically and/or psychosocially disabled.



### Statement of the Problem

The specific purpose of this study was to identify the attitudes that occupational therapists in the Republic of Kenya had toward therapeutic activities as a form of medical treatment for patients with physical and/or psycho-social dysfunctions.

### Subproblems

In order to resolve the specific problems of this study satisfactorily, five related subproblems were incorporated. These subproblems were:

1. To determine if a relationship existed between the age of an occupational therapist and his/her attitude toward therapeutic activities as a form of medical treatment.
2. To determine if there was a difference in attitudes toward therapeutic activities as a form of medical treatment between male and female occupational therapists.
3. To determine if a relationship existed between years of experience of an occupational therapist and his/her attitude toward therapeutic activities as a form of medical treatment.
4. To identify the common roles assumed by occupational therapists practising in the Republic of Kenya.
5. To determine if there was a difference in attitudes toward therapeutic activities as a form of medical treatment between urban and rural occupational therapists.



## Hypotheses

The following pertinent null hypotheses were tested at alpha = 0.05 level of significance.

NH<sub>1</sub>: There was no relationship between the age of an occupational therapist and his/her attitude toward therapeutic activities.

NH<sub>2</sub>: There was no significant difference between the attitudes possessed by male and female occupational therapists toward therapeutic activities.

NH<sub>3</sub>: There was no relationship between the years of experience of an occupational therapist and his/her attitudes toward therapeutic activities.

NH<sub>4</sub>: There was no relationship between the perceived roles of an occupational therapist and his/her attitudes toward therapeutic activities.

NH<sub>5</sub>: There was no significant difference between the attitudes possessed by urban and rural occupational therapists toward therapeutic activities.



## The Rationale and Importance of the Study

From an examination of occupational therapy literature it was found that therapeutic activities are essential apparatus that an occupational therapist uses to cure or to alleviate disease and/or rehabilitate patients. These activities are usually simple and in most cases ordinary things that human beings do or make for their survival, comfort, pleasure, solution of everyday problems, and for their self-expression. Marshall (1973) exemplified this when she discussed the uniqueness of occupational therapy. The author wrote:

The occupational therapist is unique in his use of man's technology as therapeutic tools. The occupational skills or technology used by modern man are but outgrowths from the need, production, and use of material culture. The very same skills used to provide shelters, tools, transportation . . . and esthetically designed goods are used therapeutically by the occupational therapist. (p. 20)

In spite of the apparent simplicity, the importance of therapeutic activities to the occupational therapy profession is tremendous. For instance, these activities provide the much publicized uniqueness of occupational therapy. Without therapeutic activities, it would be almost impossible to distinguish occupational therapy from the wide range of health professions that comprise medicine.

The significance of therapeutic activities, however, is not always a matter of general agreement. Such lack of



agreement is readily observed in occupational therapy departments. Some occupational therapists strictly utilize therapeutic activities as their main tool of operation while others de-emphasize therapeutic activities and instead incorporate other procedures without really exhausting the possibility of using therapeutic activities. This latter tendency is seen by some authorities as means of uplifting the status of occupational therapy through acquiring more scientific knowledge and techniques. Cynkin (1979) was of this opinion when she wrote:

For credibility and respectability, occupational therapy has continued to look to the sciences and also to the theoreticians in other disciplines . . . . Emphasis on techniques has increased as academic knowledge has proliferated to keep pace with bases for rationalizing these techniques. Stress on activities has continually diminished. (p. 8)

Being a proponent and a committed supporter of therapeutic activities, Cynkin questioned the significance of the adopted theories and techniques:

How do these techniques relate to what we believe about activities? How do they fit in with an activity oriented base for treatment? {These techniques--mine} squeeze activities, distort, and deform their intent in order to fit with current techniques. (p. 8)

In further discussing the issue, Cynkin predicted that "The ultimate outcome {of de-emphasis of therapeutic activities} is the virtual disavowal of activities as the core of occupational therapy that is already evident in many areas of practice" (p. 8). The author is not in any way



advocating that the theory of the profession be limited to a narrow theoretical base for that in itself would be academic sacrilege. She is in effect saying that the techniques and the therapeutic activities should be complementary.

Lack of acceptance of occupational therapy per se by doctors, other medical personnel, and lay people has been the concern of the profession for a long time. Therapeutic activities have been blamed for this lack of acceptance. Their simplicity and perceived naivete is seen as denying occupational therapists the much aspired recognition and prestige. For this reason, more than anything else, occupational therapists are bound to denounce therapeutic activities.

This study determined the nature of occupational therapists' attitudes toward therapeutic activities by investigating their (occupational therapists') reaction toward the same, through the research instruments. The findings may be of use to all or any of the following.

The findings of this study may be of interest to curriculum designers and planners in occupational therapy education. These personnel might use the findings to determine and justify the number of credit hours in the curriculum allocated to courses dealing with therapeutic activities.

By identifying the attitudes possessed by occupational therapists toward therapeutic media, the theory of treatment media in occupational therapy could be highly



enriched. Administrators and policy makers in the profession may find a basis for making policies and decisions concerning treatment modalities or procedures in occupational therapy.

The findings of this investigation might remove the apparent hesitancy in utilizing therapeutic activities on the part of occupational therapists. This is in accordance with the belief that awareness of one's feelings toward an object can regenerate positive thinking toward the object. The positive thinking may reactivate a new interest in activities as a form of medical treatment.

Finally, this study might contribute to the theory of therapeutic activities directly or indirectly by establishing a basis for future studies. It will hence be a step toward an area hardly researched but in desperate need for research. Nystrom (1974) was aware of this lack of research when he wrote the following:

For us in occupational therapy, the fundamental area for research is and probably will be the nature and meaning of activity. (p. 337)



### Definition of Terms

The following are the operational definitions of the terms that will be used throughout this study.

Attitude. For this study, the term "attitude" will be used to refer to "the predisposition of the individual to evaluate some symbol or object or aspect of his world in a favourable and unfavourable manner" (Katz, 1960, P. 168).

Administration/Supervision. These two terms will be treated as synonyms in this study. They will be used to mean "the total processes through which appropriate human and material resources are made available and made effective for accomplishing the purposes of an enterprise" (The American Association of School Administrators, 1955, p. 10). The terms will be used to mean that role of an occupational therapists which involves writing of departmental reports, orienting new personnel, planning, organizing, directing, coordinating, ordering, and budgeting.

Consultation. The term is defined as "the giving of advice, assistance or opinion based on professional knowledge, skill and judgement in the application of occupational therapy in treatment and collaborative programming" (American Occupational Therapy Association Task Force, 1969, p. 64). For the purpose of this study, the term will be used to mean the role of an occupational therapist which involves offering of advice and counselling to patients, clients and their families, relatives and friends.



Clinical Supervision. This means that role of an occupational therapist which includes instruction of occupational therapist as to the use of therapeutic activities in a clinical setting. The terms will be used to mean supervision, instruction, and evaluation of occupational therapy students while on clinical practice.

Occupational Therapy. Several definitions have been advanced for the purpose of occupational therapy. The definition adopted by the American Occupational Therapy Association in 1977 will be used for this study. Reed and Sanderson (1980) quoted the definition:

Occupational therapy is the application of occupation, (unique feature) any activity in which one engages for evaluation, diagnosis and treatment (process) of problems interfering with functional performance . . . in persons impaired by physical illness or injury; emotional disorder, congenital or developmental disability, or the aging process . . . in order to achieve optimum functioning and for prevention and health maintenance. (p. 4)

Occupational Therapists. The terms will be used to refer to all persons engaged in the practice of occupational therapy and are in possession of a diploma in occupational therapy or higher qualification from the Medical Training Centre (Nairobi) or any other occupational therapy school recognized by the Kenya Occupational Therapists Association.

Evaluation. Good (1959) defined evaluation as "The consideration of evidence in the light of value standards and in terms of the particular situation and the goals which the group or individual is striving to attain" (p. 209).



The term will be used to mean that process of collecting and organizing relevant information about a patient or client so that the occupational therapist is able to plan and implement a program of treatment that can be meaningful, effective and appropriate to the patient or client.

Research. Good (1959) also defined the term "research" as "the careful, critical, disciplined inquiry, varying in technique and method according to the nature and conditions of the problem identified, directed toward the clarification or resolution (or both) of a problem" (p. 464). For this study, the term will be used to mean engagement in critical and exhaustive investigations or experimentations with the aim of discovering new facts, and making correct interpretations and reviewing the already accepted facts to advance knowledge in occupational therapy.

Role(s). The definition of role used in this study is the one given by Jones and Gerard (1967). The authors defined role as "the behavior that is characteristic of a person or persons who occupy a position in the group" (p. 718). The role(s) of an occupational therapist will mean the various duties performed by an occupational therapist. These duties were delineated by the Task Force of the American Occupational Therapy Association (1966) as "evaluation, planning, treating, reporting and recording, researching and publishing, administration, instruction, supervision, and consultation" (pp. 82-85). This study will compress these duties to seven main ones, namely: treatment,



teaching, consultation, research, evaluation, administration, and clinical supervision.

Treatment. The Tabers medical dictionary (1962) defines treatment as "any specific procedure used for the cure or the amelioration of a disease or pathological condition." The term will be used to mean the use of therapeutic activities to cure or to alleviate disease.

Teaching. Good (1959) defined the term as "the act of instructing." It will be used to mean the role of occupational therapists within a school of occupational therapy which basically involves provision of materials, activities, and guidance that facilitate learning of occupational therapy students.

Therapeutic Activities. This is a generic term that incorporates all those things that a patient does in an occupational therapy department. In this study, the term will be used to mean any exertion of energy that involves the use of materials, tools, and/or equipment in a particular direction with the aim of curing or at least contributing to the cure, alleviation of disease and/or rehabilitation and habilitation of patients with physical and/or psychosocial dysfunctions.



### Assumptions

Underlying this study were the following basic assumptions:

1. That the subjects of this study possessed the knowledge and insight to accurately complete the instrument of the study;
2. That the Likert scaling technique used in the construction of the research instrument was reliable and valid;
3. That the responses received from the participants of the study gave the investigator a true indication of the respondents' attitudes;
4. That attitudes are measurable and that the statements comprising Section C of the questionnaire elicited the attitudes of Kenyan occupational therapists; and
5. That the respondents freely and honestly expressed their attitudes.

### Limitations

The focus of this research was to determine the attitudes of occupational therapists in Kenya toward therapeutic activities. The study was limited in the following:

1. The study was limited to practising occupational therapists in the Republic of Kenya.
2. The study was limited to the prevailing definitions and assumptions inherent in attitudinal studies.
3. The investigator was not able to verify the certainty



and/or uncertainty of the participants in responding to the research instrument. Whether the feelings expressed and hence the attitudes displayed are temporary or permanent was not attended to. Individual attitudes were inferred from the individual responses of the research instrument. Thurstone and Chave (1929) were aware of this when they wrote:

All that we can do with attitude scale is to measure the attitude actually expressed with the full realization that the subject may be consciously hiding his true attitude . . . . {What} we can do is minimize as far as possible the conditions that prevent our subjects from telling the truth. (p. 10)

4. A pilot study on the population of the study was not possible due to the distance, time and financial restrictions. Instead a sample of occupational therapists from Edmonton hospitals was used.
5. Another limitation of this study was the involvement of a third party in the distribution and collection of the questionnaires in Kenya. This limitation could have had an effect on the rate of return and the outcome of the research.

#### The Population

The total population for this study included the 68 occupational therapists engaged in occupational therapy practice at the time of this study. These occupational therapists were employees of the Ministry of Health and were unevenly distributed in the seven provinces of the Republic of



Kenya.

At the time of this study, occupational therapy service was only available at the following hospitals:

1. Kenyatta National Hospital (Nairobi);
2. Coast General Hospital (Mombasa);
3. Nyanza General Hospital (Kisumu);
4. Nyeri General Hospital;
5. Kakamega General Hospital;
6. Meru District Hospital;
7. Busia Hospital;
8. Muranga District Hospital;
9. Wajir Hospital;
10. Thika Hospital;
11. Kisii Hospital;
12. Machakos General Hospital;
13. Kiambu District Hospital;
14. Embu Provincial Hospital;
15. Eldoret Hospital;
16. Nakuru Hospital;
17. Gilgil Mathari--estension; and
18. Mathari Mental Hospital (Nairobi).

Map 1 shows the location of these hospitals in Kenya.

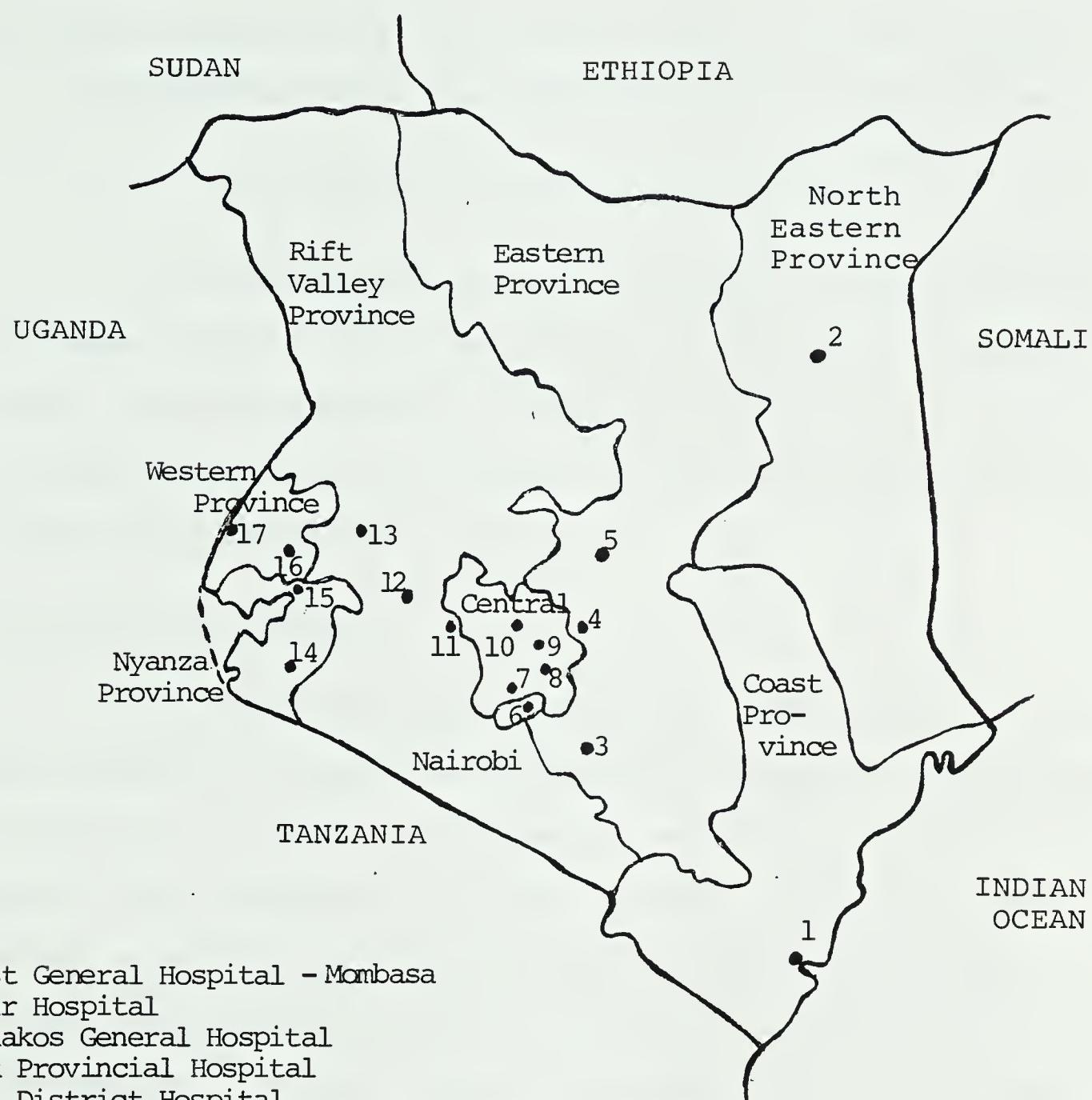
#### Instrumentation

The data required for treating the subproblems and testing the hypotheses advanced for this study were collected by means of a questionnaire designed by the investigator. This method of data collection was chosen for the following reasons:

1. The questionnaire allowed the collection of a wide range of data by a single type of device.
2. The questionnaire allowed the collection of data from Kenyan occupational therapists who live thousands of miles away from the investigator.
3. The questionnaire cut down the amount of time and financial involvement to a minimum.



Map of Kenya Showing the Location of Hospitals Where the Participants of the Study Worked



Key:

1. Coast General Hospital - Mombasa
2. Wajir Hospital
3. Machakos General Hospital
4. Embu Provincial Hospital
5. Meru District Hospital
6. Kenyatta National Hospital and Mathari Mental Hospital
7. Kiambu District Hospital
8. Muranga District Hospital
9. Thika Hospital
10. Nyeri General Hospital
11. Gilgil - Mathari extension
12. Nakuru Hospital
13. Eldoret Hospital
14. Kisii Hospital
15. Nyanza General Hospital
16. Kakamega General Hospital
17. Busia Hospital



4. The questionnaire was easily constructed and distributed.
5. The questionnaire was relevant for this study for the information sought was obtainable through this means.

#### Development of the Questionnaire

The development of the instrument for this study was in three phases. The first phase was the initial development; the second phase was development of the pilot study instrument; and the third phase was the development of the final study instrument.

#### Initial Development

The questionnaire consisted of three parts. Part A was designed to solicit occupational therapists' demographic information as well as information about the institution in which the occupational therapist worked. Part B was prepared to solicit from the participants the role(s) they acted most frequently during a forty hour week practice of occupational therapy. Part C included a pool of statements or items reflective of therapeutic activities. These statements were derived from the literature of occupational therapy and other studies related to this one.

#### Construction of the Questionnaire

The investigator reviewed the techniques used for the measurement of attitudes. Out of the five techniques identified and discussed by Oskamp (1977), only two were



considered for the study--Likert and Thurstone techniques. These two were weighed one against the other in order to determine which, out of the two, would be the most appropriate. Likert's scaling technique was thought to be more appropriate for this study for the following reasons:

1. The Likert scaling technique was less laborious to construct even though it produced higher or the same reliability coefficients. Edward and Kenney's (1946) findings supported this proposition. Lemon (1973) reported that "the study showed that {Likert Scale} correlated highly with equal appearing intervals {although} it took half the time to construct" (p. 72).
2. Hough and Seiler (1970) arrived at the same conclusion when they did an empirical comparison of Thurstone and Likert's techniques. The authors reported their findings thus:

The Likerts technique produced a scale with a split-half reliability equal to that of the Thurstone scale, or it produced a higher reliability using the same number of items. (pp. 161-162)

However, the process involved in constructing Likert scaling technique is less laborious.

Mainly for these reasons, the Likert scaling technique was accepted for the purposes of this study.



### The Procedure

The investigator collected 82 items from the professional literature and other attitudinal studies. These items were reviewed by three occupational therapists to ascertain their clarity and usefulness in measuring attitudes toward therapeutic activities. Only 53 of the 82 items were found suitable after the critical analysis. These reviewers found the other 29 items either ambiguous or irrelevant to the study.

For the 53 items that survived the scrutiny, a five-point Likert type scale was designed for each item to allow for expression of opinions ranging from very strong agreement to very strong disagreement.

### Arrangement and Nature of Items

In order to maximize the content validity of each of the items on the questionnaire, they were arranged to eliminate any suggestion or opportunity for the respondent to duplicate a choice of answers. Care was taken in the placement of items on the instrument to ensure that the design of the questionnaire would not encourage random responses.

The problem of "extremity response" prevalent in studies such as this one was also imminent. The investigator attempted to counteract the problem by constructing a scale consisting of equal items keyed on the negative and positive directions. It was hoped that this would counter



balance the positively and negatively answered items.

The three parts were assembled into the questionnaire and handed over to the thesis supervisor for review and criticism. From this review, it was recommended that some minor changes in the format and style be made to the instrument. The recommendations were implemented. Another review was conducted by the supervisor before submitting the questionnaire to a specialist in instrument designing from the Department of Educational Psychology, University of Alberta, for analysis and a further critical review. It was hoped that this latter review would enhance the instrument's face and content validity. The reviewer recommended no substantial changes. However, it was recommended that modifications be made in the format and in the phrasing of some items. These recommendations were immediately implemented.

The investigator and the thesis supervisor went over the instrument again to ensure the implementation of the recommendations. It was found acceptable and with the recommendation from the supervisor, the instrument was used in the pilot study.

#### The Pilot Study

In an attempt to improve the validity and reliability of the instrument, a pilot study was conducted. This was in accordance with the prescription of the researchers in the field of attitudinal studies. One of such researchers, Tuckman (1978), stated:



If a series of items are intended to measure the same variable . . . , it is desirable to determine whether those items are measuring the same thing. To determine this, the scale would be administered to a pilot sample.  
(p. 225)

### The Pilot Sample

The pilot sample consisted of 20 occupational therapists engaged in occupational therapy practice in hospitals within the City of Edmonton (Alberta). The occupational therapists were randomly selected from the register of the Canadian Occupational Therapy Association using a table of random numbers.

Underlying the use of occupational therapists from Edmonton, a large urban centre in an industrialized country, was the assumption that they (Edmonton therapists) were not significantly different in their educational preparation from the population of this study.

### Administration of the Pilot

Copies of the questionnaire were distributed through the mail. Each questionnaire (Appendix A) was accompanied by a letter of transmittal and a questionnaire cover sheet (Appendices A and C, respectively). The participants were requested to return the completed questionnaire by the established deadline date using the self-addressed stamped envelope provided by the investigator.



### Results of the Pilot

Of the 20 questionnaires distributed, 16 (80%) were returned. Two were incomplete and therefore unusable. Thus a total of 14 questionnaires (70%) were analyzed for the purposes of the pilot study.

The analysis of the questionnaires returned gave no indication that any major revision was necessary or desirable in the wording of statements or the style and format of the questionnaire. The following observations were made:

1. The average time for completion of the questionnaire was 15 minutes.

2. In all but two instances, questionnaires were completed.

The reasons given for not completing the two questionnaires were: (a) the respondent did not know the operational definition of therapeutic activities; (b) the respondent was no longer working as an occupational therapist and was of the opinion that it would be unfair to respond to the instrument.

### Treatment of the Pilot Study Data

The data obtained from the pilot sample was computed to determine the means ( $\bar{x}$ ) and the standard deviations of the items. The investigator hoped to distinguish between those items that were geared toward a positive or negative direction. Discriminability of items would be detected through an examination of the standard deviations.



The mean of the 53 items (grand mean) was considered to determine the dividing line between items reflecting positive and negative attitudes. A grand mean of 2.8 (rounded) was obtained. All the items with a mean below the grand mean were considered as reflective of negative attitudes, while those with a mean above 2.8 were treated as items portraying positive attitudes. The items with a mean of 2.8 were discarded. Under this treatment, only one item (Item II) was discarded.

A further analysis was deemed necessary to arrive at a more refined instrument. Item analysis was thought to be just that analysis. The analysis is used to select those items that yield the best discrimination. It is in fact one of the strengths of the Likert scaling technique used in the construction of the instrument for this study. Oskamp (1977) revealed this when he stated:

A great strength of the Likert method is its use of Item analysis technique to 'purify' the scale by keeping only the items from the initial item pool. (p. 31)

In order to accomplish item analysis, it was arbitrarily decided to take the top 30% of the respondents scoring highest on the total pool of items and the bottom 30% of the respondents scoring lowest. The items which failed to discriminate significantly between these two groups were discarded. This was in accordance with Oskamp's proposition in his discussion of item analysis. He said:

A common way of accomplishing {Item analysis} is to compare the groups of respondents scoring highest on the total pool of items . . . with the group scoring lowest . . . , thus eliminating the middle group whose attitudes may be less



clear, less consistent, less strongly held, and less well informed. If a particular item does not discriminate significantly between these groups--that is, does not have a significantly different mean scores for the top and bottom groups--it is clear that it is measuring some other dimension than the general attitude involved in the scale. (p. 31)

A total of 30 items survived the analysis. These items were used to compose Section C of the final questionnaire.

### The Final Questionnaire

With recommendation from the thesis supervisor, the final questionnaire was constructed. It contained the three sections--A, B and C (see Appendix D).

A letter of transmittal and a questionnaire cover sheet were drafted. Each questionnaire was to be accompanied by these two documents (see Appendices E and F).

### Reliability and Validity of the Instrument

The instrument for this research was developed through a series of steps which aimed at fostering maximum validity and reliability to the instrument.

The initial collection of the items were rigorously scrutinized by a panel of three qualified occupational therapists. The panel discarded 29 of the original pool of 82 items for either lack of clarity or apparent failure to answer the research questions.

The 53 remaining items were thoroughly scanned and



analyzed by both the writer and the thesis supervisor before passing them over to an instrument design specialist. The amendments recommended by the specialist were instituted before the pilot study.

The purpose of the pilot study was to determine the appropriateness of the 53 items in answering the research question, and also in the consistency in which the respondents answered the various items. In so doing, the validity and reliability of the instrument were sought.

Finally, item analysis was applied to the 53 items. Only 30 items survived the analysis. These 30 items made up Section C of the final questionnaire.

#### Background of the Research Design

The investigator decided to gather available information either for replication purposes or to help determine if similar studies were existent in occupational therapy literature. This objective was first approached by conducting a manual search in the literature of the profession documented in the last ten years. The search exposed nothing usable for this study. A second search was deemed necessary. Education Research Information Centre (ERIC) was considered to be an appropriate information base and was employed using the following descriptors: occupational therapy, attitudes, occupational therapists, therapeutic activities, employee attitudes, negative attitudes, occupational therapists' attitudes, and positive attitudes. These descriptors were



combined in several ways in an attempt to reflect attitudes of occupational therapists toward therapeutic activities. The search of this data base proved unproductive too.

The unproductivity of the two searches confirmed to the investigator that the topic "Attitudes of occupational therapists toward therapeutic activities" had not been researched. The study would therefore be a forerunner or one among others that may be attempting to document the feelings of occupational therapists toward their medium of treatment. The apparent lack of information in this sensitive area prompted the investigator to take the decision to carry out the study.

There were, however, many factors to be considered before starting the investigation. Such factors as the site, expenses, time limitations were all taken into consideration. It was decided that the site of the study would be in Kenya, the home country of the investigator, with the pilot study being conducted in Edmonton. This decision to conduct the research in Kenya was immediately communicated to the Senior Deputy Director of Medical Services (Training) and the Senior Occupational Therapist in Kenya. They agreed to assist in distributing the instrument to the population of the study.



## Methodology

The following methodology was used to collect data for this research.

Because the researcher had experience as a practicing occupational therapist in Kenya, the decision was made to conduct this attitudinal study with occupational therapists who practice in Kenya. To secure permission to involve these therapists in the research, discussions were held with the Senior Deputy Director of Medical Services (Training) and the Senior Occupational Therapist in the republic of Kenya. At the time these discussions were held the investigator was working toward the course work of the Master's degree in the Faculty of Graduate Studies and Research at the University of Alberta. Most of the discussion was through the telephone and the mail (see Appendices G and H).

As a result of these discussions, it was agreed that the therapists in Kenya would form the population of this study.

At the time of the investigation, there were 68 occupational therapists working in a number of different hospital settings. They attended to either psychosocially or physically dysfunctional patients, both adults and children. Some of these therapists had definite roles while others acted in several roles during the forty hour work-week. Some of those roles were: treatment, administration/supervision, teaching, consultation, evaluation, clinical supervision, and research.



The next step in conducting this study was to select the instrument to be used to collect data for analysis and to prepare that instrument for use in the major phase of the research. The procedures used in designing the research instrument are fully described in another section of this chapter.

A covering letter was prepared that was sent to participants. The purpose of this letter was to give an overview of the research, the role that participants would have in the study, and to present participants with a deadline date when completed instruments were to be returned to the researcher. Appendices D and E contain a copy of this letter, as well as a copy of the research instrument that accompanied the covering letter.

Of the 68 questionnaires that were posted in Kenya to the members of the population of this study, 45 were returned by the deadline date. This represented a 66.2% rate of return. A follow-up letter was prepared and posted to all members of population. It was hoped that this follow-up letter would stir up those delinquent members who had failed to meet the deadline (see Appendix I).

The data thus obtained were treated to statistical analysis derived from the Statistical Package for Social Sciences (SPSS) to answer the specific problem, and the subproblems, and to test the null hypotheses of this study. The results of the analyses are reported in the final chapter of the thesis.



### Organization of the Thesis

The problem has been defined and discussed in Chapter I. Background information pertinent to the study and its importance was provided. Operational definitions, assumptions, limitations, and delimitations were also advanced in this chapter. Ways and means of securing, treating and testing Pilot data were discussed. The final questionnaire construction was discussed.

Chapter II will be devoted to a review of literature and the conceptual framework of the study. Particular references will be made to statements with positive and/or negative connotations about therapeutic activities.

Chapter III gives an account of how the data for this study were analysed in order to answer the research questions advanced at the beginning of the thesis.

Chapter IV contains a complete listing of the findings of the study. The findings range from the testing of the hypothesis to any unexpected findings.

Important conclusions, recommendations and implications drawn from the study will also be presented in Chapter IV.



## CHAPTER II

### LITERATURE REVIEW

In Chapter I all phases of the research design were presented. The specific problem, subproblems, hypotheses, assumptions, limitations, delimitations, definitions, and the methodology were explicitly stated.

This chapter will include the review of literature focusing on those aspects of the study considered essential for the development of a coherent conceptual framework for the study. The concepts of attitude, therapeutic activities, and occupational therapy are the principal components that make up this chapter. Literature on research studies related to this one were reviewed and those considered relevant are also included as content of this chapter.

#### Review of Pertinent Literature

This review is organized into eight areas:

1. An historical survey of the use of therapeutic activities for treatment;
2. Training of occupational therapists for competency in therapeutic activities;
3. Abuse of therapeutic activities;
4. Attitudes;



5. Reactions toward therapeutic activities; positive and negative reactions;
6. Conceptualization of therapeutic activities and attitudes;
7. Professionalism in occupational therapy; and
8. Related studies.

Occupational therapy is a work-oriented form of medical treatment which is prescribed by the attending physician. The following definition of occupational therapy by the American Occupational Therapy Association provides the significance of activity or work in occupational therapy.

The definition of the Association reads: "A program of selected activity conducted as treatment under medical direction for physical and psychological {or phychosocial} problems" (p. 3). Such terms as "work," "occupation," and "activity" are used to mean the same thing in occupational therapy practice. The term "activity" is, however, used more frequently than the other two. Preitz (1969) described activity as:

Logically related repetitive task which may be composed of one or more tasks required to cut, shape, form, or assemble . . . {It is} taught and supervised by a therapist to a patient assigned for treatment. (p. 16)

Pattison (1922) indicated the salience of activities when he defined occupational therapy as "any activity . . . mental or physical, definitely prescribed and guided for the distinct purpose of contributing to and hasten recovery of disease or injury" (p. 21). The definition contained in The Occupational Therapy prospectus, University of Alberta (1978)



in spite of its verbosity and unnecessary scientific jargon, includes the term "occupation." The definition reads:

Occupational therapy is an applied social science eclectically drawing upon the biological, social and behavioural disciplines for the basic understanding of man, occupation, and social organizational systems. (no page number)

This definition is of course a radical shift from the medical model to the social science model.

Before the contemporary proliferation of activity administering therapists, the term activity always meant therapeutic activity. But with the unprecedented proliferation, occupational therapists have been more wary and are preferring to use the adjective "therapeutic" to qualify their media of treatment. There is even a general consensus amongst those in favour of using activities that for any activity to be therapeutic, it must possess some or all of the following characteristics delineated by Hopkins, Smith and Tiffany (1978):

1. Be goal directed. . .;
2. Have significance at some level to the client. . .;
3. Require client involvement. . .;
4. Be geared to prevention or malfunction and/or maintenance or improvement of function and quality of life. . .;
5. Reflect client involvement in life task situation. . .;
6. Relate to interest of clients. . .;
7. Be adaptable and gradable. . .; and
8. Be determined through occupational therapists professional judgement based on knowledge. (pp. 100-101)

With these characteristics in mind, plus the ingenuity of an



occupational therapist, the therapist is able to arrive at an appropriate therapeutic activity for a given patient.

It should be pointed out that it is necessary for an occupational therapist to complement therapeutic activities with other techniques in order to accomplish the aims of treatment that are established by the referring physician. But not to the extent that these other activities distract occupational therapists from therapeutic activities and diminish the unique role of occupational therapy with its therapeutic activities. Cynkin (1979) was extremely bitter in her criticism of the total adoption of other techniques as substitutes for therapeutic activities. She questioned: "How do these techniques relate to what we believe about activities? How do they {other techniques} fit in with an activity-oriented base for treatment?" (p. 8). In further criticizing these other techniques, Cynkin revealed the adverse effects of adopting these other techniques when she wrote:

Activities have been squeezed, their intent distorted and deformed, to fit in with {the} techniques . . . . The outcome {has been} total disavowal of activities as the core of occupational therapy that is already evident in many areas of practice. (p. 8)

Cynkin in her criticism was not advocating a total disavowal of other techniques as treatment media. She was stating a position in opposition of the apparent elimination of therapeutic activities in occupational therapy. This author saw an integration of other techniques with therapeutic activities as a step toward the development of a concrete



theoretical and philosophical base for occupational therapy.

#### An Historical Survey of the Use of Therapeutic Activities

Healing qualities of work, exercises, and play were recognized and utilized thousands of years before the emergence of occupational therapy as a paramedical profession. The value of labour as cure and/or protection from disease was reported in the writings of the ancient Hebrews and Greeks. Socrates, for example, was quoted as having said that, "A man should inure himself to voluntary labour, and not give up to indulgence and pleasure, as they beget no good constitution of body nor knowledge of mind" (Hopkins, 1978, p. 4).

The use of work for therapeutic purposes has a history dating as far back as 3400 B.C. Records indicate that "Egyptian men of leisure were involved in outdoor work and did not spend their days in idleness" (Hopkins, p. 4). As far back as 2600 B.C., the Chinese taught that disease was caused by organic inactivity and thus used physical training for the promotion of health. This school of thought could be seen as the roots of the origin of occupational therapy. It was that basic conviction that activity influenced recovery from the diseases of joints, muscles, and the mind that promoted the development of occupational therapy as a unique paramedical profession. Cynkin (1979) gave support to the above statement when she stated:



Early occupational therapy was founded on the notion that being engaged in activities promotes mental and physical well being and that, conversely, absence of activity leads. . . to deterioration or loss of mental and physical functioning. (p. 7)

This notion of engaging in activities to maintain or acquire good health was further documented by McDonald (1970) who reviewed the historical use of activities. According to McDonald in:

600-200 B.C. Pythagorus, Thales, Aeschulapius and Orpheus used music as remedy. Hippocrates recommended wrestling, riding, and labour for strong exercises. Galen A.D. 130-200 promoted treatment by occupation. He suggested such activities as digging, ploughing, fishing, house, ship or plough building. Thomas Syndenham A.D. 1200-1700 recommended occupational exercises and recreations for toughening up. He prescribed riding for gout, colic, diarrhoea, constipation and asthma. Audry A.D. 1200-1700 prescribed riding and hunting for {his patients}. He prescribed ploughing, digging, and carrying loads for the less well-to-do. Ramazzini A.D. 1700 noted the therapeutic value of such activities as weaving, cobbling, tailoring, and pottery. Tissot 1780 recommended sawing, sewing, playing violin, sweeping, bell-ringing, hammering, chopping wood, riding and swimming as good active occupational exercise {for disabilities of muscles and joints}. Sinclair encouraged exercises through work. (pp. 3-6)

This overview of treatment activities is indicative of the extensive utilization of activities in treatment. It should be noted, however, that both the prescription and delivery of these activities was carried out by the physician and not an occupational therapist. The increased demand in the 1900's dictated that a paramedical discipline be established to assist the physician in the delivery of these activities.

In its infancy the delivery of therapeutic



activities by occupational therapists was not all-encompassing as it should have been. It was evident that more therapists who were providing treatment were concentrating on the mentally rather than on the physically ill. Hopkins (1978) noted this in her discussion of the beginnings of occupational therapy in the United States of America. She wrote:

In the midst of French Revolution (1778). . . . Philippe Pinel introduced work treatment in the Bicetre Asylum for the insane. . . . Benjamin Franklin (1752) suggested that inmates (at Pennsylvania hospital) . . . {be} provided with light manual labor . . . . In 1798 Benjamin Rush . . . advocated work as a remedial measure for patients in Pennsylvania hospital . . . . He advised that certain kinds of labor, exercises and amusement be continued for patients. (p. 5)

In further discussing work as treatment, Hopkins said:

In Germany, Johann Christian . . . recommended the use of work or occupational therapy {for the treatment of the insane}. In the 1800's Samuel Tuke . . . used work or occupational therapy to cure mental illness. (p. 5)

The relationship of occupational therapy with the mentally ill continues to be an important part of the profession in the last decades of the 20th century.

#### A History of Occupational Therapy in North America

Much credit for the development of the occupational therapy profession is given to the North American nations, particularly the United States of America. The writer considers it appropriate to provide a history of the development of occupational therapy in this country.

The review of literature indicates that American



occupational therapy was highly influenced by the European models of psychiatric treatment that was brought back by American visitors to Europe, such as Thomas Scattergood and Thomas Eddy. Their observations and eventual adoption of these European psychiatric models resulted in the establishment of asylums for the insane in Philadelphia and Boston, respectively. Both Scattergood and Eddy incorporated the European principle of "occupation and restraint" into their hospital programs. In both of these hospitals, treatment was referred to as moral treatment. It (moral treatment) historically seems to be the undeclared beginning of occupational therapy in North America. Bockoven (1971), in describing moral treatment, said:

The seemingly bold statement that is probably more understandable to occupational therapists than any other professional group is that the history of moral treatment in America is not only synonymous with but is the history of occupational therapy. {This} assertion is based on the conception that occupational therapy {was} based first and foremost upon . . . a fundamental perception of the individual's need to engage in creative activity in relation to his fellow man. (p. 223)

Moral treatment did not survive because the environment of America was highly mobile and fast developing and there was a shift in the medical view regarding mental illness. This shift was from the moral-emotional basis on which the moral treatment was founded to cellular brain pathology as the only scientific basis for mental illness (Bockoven, pp. 223-224). With this rethinking, hospitals began to abandon activity programs and the mentally ill were



once again regarded as incurable. Therapeutic nihilism pervaded the mental hospital scene.

It was not until the importance of emotional and psychological consideration was re-emphasized by the medical profession that occupational therapy was once again considered useful as treatment. This thinking was further reinforced following the First World War when occupational therapy was seen as a potential rehabilitative service for returning service personnel who had been injured during the war. Woodside (1971) described this thinking as the "more concrete roots" of occupational therapy. In describing these roots, this author wrote:

More concrete roots {of occupational therapy} extend from the First World War when the country {U.S.A.} anticipated that with improved medical and surgical techniques, large numbers of wounded would need an active rehabilitation program and that this would require trained personnel . . . . {Occupational therapists'} role would be one of using crafts to reactivate the minds and motivation of the mentally ill and the limbs of the veterans, starting them on the way to vocational training. (p. 227)

This unprecedented role obviously heightened the demand for trained occupational therapists, which subsequently led to an establishment of an occupational therapy school.

In March, 1918, the first class of occupational therapists, under the title of reconstruction aides, was established at Boston. The occupational therapists were to be trained "to furnish forms of occupation to convalescents in long illnesses and to give to patients the therapeutic benefit of activity" (Hopkins, 1978, p. 11). This early



concept of occupational therapy remains true and valid in the 1980's.

Following World War I, many of the schools set for training reconstruction aides were permanently closed. But occupational therapy's impact was already being felt and in fact enjoyed in civilian hospitals. As a result of this impact, there was a heightened demand which caused the reopening of the Boston School of Occupational Therapy in 1919, followed shortly by the opening of schools at Philadelphia and St. Louis. The curriculum was apparently simple. It included "crafts or occupations . . . . Knowledge of anatomy, kinesiology, and medical conditions {was gained} through postgraduate courses" (Hopkins, p. 12). The training duration was "12 months of course work including three months of hospital-practice training" (Reed et al., p. 176). Hopkins added that, "By 1928 there were six schools of occupational therapy." In addition to Boston, Philadelphia, and St. Louis schools of occupational therapy, Milwaukee Downer College, the University of Minnesota, and the University of Toronto, Canada had accredited programs" (p. 13).

#### The American Occupational Therapy Association (AOTA)

The National Association of American Occupational Therapists was first founded under the name of The National Society for Promotion of Occupational Therapy in 1917. The founders included George Edward Barton, Thomas B. Kidner, Isabel G. Newton, Susan C. Johnson, Eleanor Clarke Slagle,



and William Dunton Rush Jr. Miss Susan E. Tracy is listed as an incorporator although she didn't attend the inauguration meeting. Reed and Sanderson (1979) list the objectives of the society as: "The advancement of occupation as a therapeutic measure; the study of the effect of occupation upon the human being and scientific dispensation of this knowledge" (p. 175). Note that membership of the society was composed of persons not required to be certified occupational therapists as is the case today.

The name of the Association was changed to American Occupational Therapists Association in 1921. In the following year an official journal of the Association was initiated under the name of Archives of Occupational Therapy. It acquired the name Occupational Therapy and Rehabilitation in 1925, and American Journal of Occupational Therapy in 1947.

Today the Association has five specialty groups; "namely, developmental disabilities, physical disabilities, mental health, geriatrics and sensory integration" (Reed et al., p. 180), which carry out the following functions:

1. Develop knowledge and skills in specific areas of occupational therapy practice;
2. Promote continuing education;
3. Promote research;
4. Promote publications;
5. Function as a resource or collaborate with any body of the Association; and
6. Respond to emerging issues as they relate to the special section. (Reed et al., p. 180-181)

Other functions of the Association are carried out by the Standards and Ethics and Education and Practice Commissions. The Standards and Ethics Commission, for example, has three



subcommissions as Reed et al. (1979) revealed:

1. Accreditation Committee, which collaborates with the American Medical Association in accrediting all college and university programs in occupational therapy and approves the occupational therapy assistants programs;
2. Certification Committee, which oversees the administration, eligibility requirements and content of the Certification Examination for occupational therapists, Registered, and the Comparable Exam for assistants; and
3. Standards Review Committee, which reviews Association documents concerned with standards and ethics to determine if the document is accurate and up to date according to association policy. (p. 181)

The American Occupational Therapists Association is hence an instrument for promoting occupational therapy as a viable health care service.

### Summary

The evolution of occupational therapy discussed so far is only true of United States of America. Such a thorough account is justified on the grounds that the United States of America has been the major force behind the development and advancement of the profession of occupational therapy. It is also true that such other forerunners as Canada and Britain enjoy an almost similar history.

### A History of Occupational Therapy in Kenya

Occupational therapy appears to have been practiced in Kenya long before the 1960's. However, there has been absolutely no systematic documentation of its history. All that is known, largely through hearsay and speculation, is that the profession was first practiced in major hospitals



in Nairobi by British occupational therapists who were employed on short-term contracts. During what appears to have been mere sojourns rather than working contracts, the therapists trained a few African assistants. These assistants are now working in the mental hospitals around the country.

#### Training of Occupational Therapists

The training of occupational therapists in the Republic of Kenya was started in 1968 at the Medical Training Centre in Nairobi. This institution caters for all paramedical personnel in Kenya.

When occupational therapy was started, it was the smallest and the youngest paramedical department. The annual intake ranged between six to ten students for the first seven years of the program. These low intakes were as a result of limitations that were placed on the training facility -- limitations such as a lack of space in the already congested institution, a lack of qualified occupational therapists to serve as teachers, and a lack of instructional materials. Since 1976 the intake of students has grown to about 20 students per annum.

To train as an occupational therapist in Kenya takes three calendar years. The training program is arranged in the following manner:

##### 1st Year:

Anatomy, physiology, psychology, psychiatry and {therapeutic activities} crafts. 12 days in O-T clinics {for orientation} and 12 days hospital practice;



2nd Year:

Neuroanatomy, medicine, kinesiology; splinting and construction of equipment and aids; O-T theory of paediatrics, psychiatry and physical medicine; 2 weeks in an institution of student's choice, e.g. special school, rehabilitation centre, practicals in physical, psychiatric and paediatric clinics, 8 days each.

3rd Year:

Practicals in physical, paediatrics, and psychiatric clinics in Nairobi--2 months each. 2 months in a general provincial or district hospital and 2 weeks in the leprosy centre. . . .

The students are assessed following an accumulative grade point average and must at all times maintain a certain standard to continue training. (Solveig, 1978, p. 372)

Upon successful completion of the program the graduates are awarded a diploma in occupational therapy. They are immediately absorbed in the Kenya Government Civil Service.

Kenya Occupational Therapists Association (K.O.T.A.)

This association was founded in 1972. It has assumed a very active part in shaping the role and image of occupational therapy in Kenya. It, however, continues to lack the support of occupational therapists. To continue to grow in strength, KOTA will need the support of all occupational therapists in Kenya.

In 1976 the Association was given recognition and full membership of the World Federation of Occupational Therapists. This unparalleled milestone in the growth of the professional Association has given occupational therapists in Kenya an opportunity to share professional views with their counterparts from other parts of the world.



## Training Occupational Therapists For Competency in Therapeutic Activities

The importance of therapeutic activities does not appear to be well entrenched in the preparation of occupational therapists. Most occupational therapy curricula only mention therapeutic activities programs as minor courses that are often taught by service departments. Even where the curricula emphasizes these courses, it is common knowledge among occupational therapists that these are actually a record keeping exercise.

The occupational therapy educator is not only faced with the problem of whether to teach therapeutic activities but also what activities to include in a treatment media course and the level of competency the students must master in performing the activities chosen. For what activities to teach, the occupational therapist is faced with an unlimited number of activities that possess most or all of the eight characteristics of a therapeutic activity identified by Hopkins et al. (1978). Cunningham (1966) described selection of the activities to be included in the curricula as a "thorny point" when this author wrote:

The selection {of activities to be taught} (brackets mine) can be varied enough to serve as a means to an end, that of giving a student a basis of learned techniques which, with initiative, will allow her to teach herself new skills quickly and adequately by any available means. (p. 385)

Inferred in the above quote is the fact that therapeutic activities can be self-acquired with a minimum of



instruction. This notion is also supported by Jantzen (1958) when she said:

No one of the courses, if given properly, attempts to make a student a cabinet maker, a master silversmith, or master weaver. Rather, each course seeks to provide knowledge and understanding of the basic processes involved and of the tools, materials, and equipment utilized in each activity. (p. 319)

McDonald (1970) was in agreement with both Cunningham (1966) and Jantzen (1958). In her address to the 5th International Congress of the World Federation of Occupational Therapists, she took the position that, "{Occupational therapy} students need to be helped in a certain number of activities. . . not experts, but capable of directing them simply and usefully" (p. 29). It would appear from the positions taken by these writers in occupational therapy that the level of competence that an occupational therapy student develops with a therapeutic activity be at either the "awareness" or "use" level.

Other writers, on the other hand, have implied a very high level of competence. For example, Barton (1921) cited by Preitz (1969) wrote:

It is highly important that the teacher of occupations to the sick should be able to tell by the sound whether or not a tool is being properly used, not account of the tool, as in the case with the shop foreman, but because the sound of the tool is the very best indication of the patient using it. (p. 107)

Preitz noted that, "The level of skill implicitly referred to in the above citation is the skill a shop foreman develops through the years of apprenticeship and journeyman in industry" (p. 48). This type of skill clearly indicates a



very high level of competency.

The review of literature directed at therapeutic activities shows a lack of consensus and ambiguity on the part of writers concerning the level of competence required of occupational therapists in performing therapeutic activities. Only Preitz (1969) was straight forward enough to recommend that, "Occupational therapy students should acquire a "use level" of skill with tools to work a variety of media" (p. 49). He defined "use level" of skill as "the degree of competency a student preparing to become a therapist should acquire with hand tools and machine tools" (p. 49). Barton (1921) called this level of skill "optimal competence."

#### Abuse of Therapeutic Activities

Misapplication or, rather, abuse of therapeutic activities can be prevalent in occupational therapy if the therapists fail to apply the principles laid down for the selection of appropriate activities. Such abuse may result in inadequate treatment or no treatment at all for the patient. This abuse may be presented in a variety of forms.

The first of these forms is violation of the principles under which therapeutic activities are prescribed. For instance, an occupational therapist must consider such factors as patients' diagnoses, interests, age and sex, among others, before adopting any particular activity for the treatment of a patient. Failure to consider these and



other interrelated factors can result in serious misapplication of therapeutic activities. It would be fallacious in such an instance to define the activities that were being administered to a patient as therapeutic. Ackley (1973) warned about this fallacy in her statement that, "Occupational therapists should not slip into the fallacy of labelling activity treatment just because it is carried on within the hospital boundaries" (p. 121). She further argued that "diversional activities" should not be called "occupational therapy" but should instead be given another designation which does not carry treatment implications. According to Ackley (1973):

Many occupational therapists consider {provision of diversional activities} treatment. I cannot agree . . . . The indiscriminate labelling of everything which occurs within the hospital as therapy or "treatment" has devalued the term. (p. 121)

Reed and Sanderson (1979) took a similar stance about diversional activities being classified as treatment activity.

They wrote:

Providing busy work and diversion continues to be identified with occupational therapy. Such identification is not longer of value to the profession. A busy occupational therapist. . . . cannot afford the luxury of providing . . . diversion from idleness. . . . Occupational therapy does not have a role in providing busy work or diversional activity. (pp. 95-96)

Another aspect which contributes to misapplication or, rather, abuse of therapeutic activities is the tendency to convert occupational therapy departments into small scale industrial enterprises where orders for goods are made and



filled. In accepting and filling orders for products made by patients in occupational therapy, many therapists tend to neglect the therapeutic value of these activities and instead concentrate on those activities whose end results are ordered or are readily salable. Dunton (1947) cautioned against this when he wrote:

Quality, quantity and salability of the product should never be permitted to obscure the main purpose of activities which is, of course, therapeutic. (p. 13)

McDonald (1970) also warned that the tendency would not only be unwise, but would also lead to exploitation of patients. This author cautioned:

Care must be taken that the patients are not exploited. . . in making things for staff or hospital sales. . . and in providing cheap labour for concerns outside the hospital.  
(p. 24)

Both the exploitation of patients and the emphasis on producing products rather than on the effect that an activity will have on a patient's illness in this instance render therapeutic activities useless and therefore a mere waste of time and resources on the part of the occupational therapist and the patient, not to mention the public at large.

The third potential source of abuse of therapeutic activities is related to the characteristic of "purposeness" of the activity in relation to the patient's treatment program. Failure of a therapeutic activity to be purposeful is misapplication of the activity as treatment media which distorts the whole concept of occupational therapy.

Carlshausen (1974) reported such misapplication when she



related the following experience:

Some years ago I visited an occupational therapy department where they {occupational therapists} did just the opposite. Weaving looms and other equipment were used only for the purpose of copying adequate movements for treatment, but not using the actual activity. Patients concentrated on movements instead of being diverted from them by the activity as such. There were no materials like wool, wood or reed, and the patients looked just as sad as the whole room. (p. 121)

Mere use of equipment to accomplish desired motions negates the very concept on which occupational therapy has been developed and in effect obscures the uniqueness of the profession. It makes it very difficult for both medical personnel and non-medical personnel to differentiate occupational therapy from another closely related health service--physiotherapy.

The last, but very important form of abuse of therapeutic activities is their application without consideration of the "contra-indications" inherent in them. A contra-indication is any condition which renders some particular line of treatment improper or undesirable (Arey, Burrows, Greenhill and Hewitt, 1957, p. 312). Such application could lead to the detriment of the patient's condition rather than its wellbeing. It reflects negligence on the part of the practising therapist and an absolute abuse of therapeutic activities.



## Attitudes

The main focus of this study was the attitudes that Kenyan occupational therapists had toward treatment media. Hence the concept "attitude" was core to this study, a fact that prompted the following intensive but brief discussion of this concept.

The term "attitude" has been defined in as many ways as the number of authors who attempt to provide a definition for this term. But in spite of the inconsistencies inherent in these definitions, the study of attitudes remains basic to the study of human behaviour. Some definitions are reviewed in the following paragraphs.

Fishbein (1967), citing Allport (1935), provided a comprehensive analysis and definition of the term "attitude." This noted sociologist wrote:

Like most abstract terms in the English language, attitude has more than one meaning. Derived from Latin *aptus*, it has on the one hand the significance of "fitness" or "adaptiveness," and like its by-form aptitude connotes a subjective or a mental state of preparation for action. . . . The first meaning is clearly preserved in modern psychology in what are often referred to as "mental attitudes". . . . In recent years it is uncommon to find explicit labelling of an attitude either "mental" or "motor." Such a practice smacks of body-mind dualism, and is therefore distasteful to the contemporary psychologists. . . . Attitudes connotes a neuropsychic state of readiness for mental and physical activity (underlined in original). (pp. 3-4)

This definition by Allport was expanded by Triandis (1971) when he defined the term in this way:



An attitude is a mental and neural state of readiness, organized through experiences, exerting a directive or dynamic influence upon the individual's response to all objects and situations with which it is related. (p. 2)

Inherent in the definitions of attitude by some authorities is their tendency to emphasize the evaluation dimension of the concept.

For instance, Katz (1967), Rockeach (1968), and Rosenberg (1960) all emphasize the evaluation dimension. They define attitude as the individual's predisposition to evaluate some symbol or object or aspect of his world in a positive or negative way. Thurstone (1967) defined attitude as "the sum total of man's inclinations and feelings, prejudice or bias, preconceived notions, ideas, fears, threats and convictions about any specific topic" (pp. 77-79).

Krech (1962), like Katz, Rockeach and Rosenberg, also emphasized the evaluation dimension of attitudes when he referred to attitudes as "enduring systems of positive or negative evaluations, emotional feelings and pro or con action tendencies with respect to social objects" (p. 139). An individual can therefore be seen to approach or avoid an object or a situation on the basis of attitudes toward the object or situation. Do attitudes then determine an individual's behaviour?

Attitudes have a direct bearing on behaviour but they cannot predict behaviour alone. The behaviour of an individual is a function of his personality and role, i.e.  $B = f(P \times R)$  (Guba and Getzels, 1957, pp. 423-441). Krech further clarified this when he noted that the behaviour of



an individual in any situation is not a reflection of attitude alone. He implicitly stated:

The behaviour of an individual in any situation is a reflection of his cognitions, wants or needs and interpersonal response traits as well as his attitude. (p. 139)

An individual's attitude is therefore only one determinant or, rather, predictor of behaviour among many others. Nonetheless, an individual's attitude has an indispensable function toward the individual's behaviour.

Attitude's basic function in predicting an individual's behaviour is to provide a better basis for prediction by accomplishing these functions that were delineated by Jones and Gerald (1967):

1. Promotion of adjustive economy by providing the individual with a ready basis for making decisions; and
2. Conferring greater stability and social predictability on an individual. (p. 432)

Elsewhere in literature, Katz (1960) reaffirmed the usefulness of attitudes as a dependent variable of an individual's behaviour when he delineated four functions of attitudes that are basic to an individual's predisposition to act. Oskamp (1977), citing Katz, listed the following functions:

1. Understanding: . . . Attitudes help us to understand our world and to make sense of occurrences around us to provide consistency and clarity in our explanation and interpretation of events {thus giving meaning to what would otherwise be unorganized chaotic universe}. This has also been called the knowledge function of attitudes.
2. Need satisfaction. {This function is a recognition of the fact that people strive to maximize the rewards in the environments and to minimize penalties}. These attitudes



{are either} adjustive in the sense of helping {people} adjust to life situations, or utilitarian in the sense that they are useful in reaching our goals.

3. Ego defense. Attitudes can also help us to enhance our self-esteem and to defend us against the "thousand slings and arrows" of life. {For example}, the employee who shrugs off criticism from the boss by saying, "The boss is just always bad-tempered," may be using unrealistic ego-defensive attitude to avoid thinking his (her) own failings.
4. Value expressive. {Attitudes which help} to establish a person's self-identity, which portrays the sort of person he is, which says in effect, "This is the way I am." (pp. 50-51)

The foregoing discussion has presented the traditional thinking about causality in attitude theory, i.e. "attitudes cause or, rather, predict a person's behaviour." However, another school of thought postulates the opposite direction of causality that an attitude can take, i.e. that behaviour causes attitude. Breer and Locke (1965) are proponents of the latter school of thought. These authors presented extensive laboratory evidence in support of their theory that, ". . . attitudes. . . of a group of people are determined by their task experience" (Triandis, 1971, p. 6).

It should be mentioned in closure of this section that the evaluative dimension of attitudes discussed in the beginning of the section is only one of the three main ones; namely, the cognitive dimension or component, the feeling or evaluative component or dimension, and the action tendency component or dimension. The action tendency component refers to the individual's disposition toward the given object and will have a bearing upon how the individual may act if given a choice. The cognitive component is described by a person's



categorizations, and the relationships between categories.

The last dimension is the affective one which describes a person's evaluation of some object, person or group. It is the consistency of the three components that suggests an existence of an attitude in an individual; as Triandis (1971) pointed out when he said that, "{The} consistencies in "thinking," "feeling," and "acting" suggest the existence of an attitude" (p. 8).

#### Attitudes of Occupational Therapists Toward Therapeutic Activities

Literature that has been written on attitudes indicates that an attitude can be described as the intensity of positive or negative effect for or against an object. Thus an occupational therapist's attitude toward therapeutic activities can be determined by reviewing expressed feelings of liking or disliking toward these activities. This section of literature review will attempt to explore the nature of feelings toward therapeutic activities expressed either explicitly or implicitly, and/or tacitly or publicly by occupational therapists. It was hoped that these attitudes and/or opinions would indicate the attitudes that occupational therapists have toward therapeutic activities.

#### Positive Attitudes

In spite of the subtle ambivalence noted in the professional literature directed at the use of therapeutic activities, some occupational therapists continue to uphold the significance of these activities in the treatment/rehabilitation of their occupational therapy clients. These



therapists insist that these activities are and shall remain to be the best treatment tools of the occupational therapist.

This group of occupational therapists sees the school for preparing these professionals as the best place for developing the proper attitudes toward therapeutic activities. Their view is not in isolation. Perrow (1979, p. 26) shares the position taken by this group of therapists that the training of a professional is responsible for inculcating rules, procedures, and ethics of the profession. The proponents of therapeutic activities have been partly responsible for incorporating "training in activities" into occupational therapy curricula. McDonald (1970) confirmed this when she wrote:

Occupations are mediating factors which bring the therapist and the patient together in a treatment situation. The widest variety of activities are used in our work {and} the student needs to be helped in a number of these. . . . An occupational therapist with no knowledge of appropriate occupations would become a pseudo social-worker, inadequate in both fields. (p. 29)

McDonald was explicit and adamant that therapeutic activities were to be taught to occupational therapy students if the profession was to remain the sui generis profession it was considered in the past. Her position was indicative of a positive attitude toward therapeutic activities.

Mumfold (1971) was more emphatic in acclaiming the usefulness of therapeutic activities. Rather than just contending that therapeutic activities were indeed useful through unjustified personal opinions of other therapists,



this author undertook to investigate the value of activities by comparing them with "verbal skill groups" in improving interpersonal skills. Subjects were assigned to two groups. One group was introduced to a range of activities, while the other engaged in verbal discussion. The two groups were administered the Fundamental Relations Orientation Behaviour Test before and after four months of meetings. The results supported the research hypothesis that there would be a significant difference in interpersonal skills between the members of the verbal group and the activity group. Mumfold concluded from the finding of the study:

The findings suggested the importance of using activities . . . to increase interpersonal skills. The implication from the study is that activities can be used as an important tool in affecting personality change in the training group. (p. 283)

Increasing interpersonal skills or, rather, socializing the clients of occupational therapy is a preponderant objective of occupational therapy. Preitz (1969) confirmed this when he found "socialization and increasing range of motion" (p. 123) as the two major objectives for using activities. The two objectives are central to occupational therapy, and a contention that therapeutic activities are superior to other techniques in accomplishing these objectives is reflective of a positive attitude toward therapeutic activities.

Another study by Hurd (1975) indicated a positive disposition toward therapeutic activities. Hurd surveyed occupational therapists from a large district in England to



identify the treatment procedures for the affected parts of a hemiplegic (a patient with paralysis of one side of the body). Approximately 60 percent of the occupational therapists surveyed identified printing, woodwork, sanding, and stool seating (p. 90) as their major treatment activities. This 60 percent of occupational therapists can be said to have had a favourable attitude toward the use of therapeutic activities as treatment.

Aranson (1974) openly emphasized the salience of therapeutic activities when describing the role of occupational therapists in a geriatric day hospital. The author identified the role as "supervision of activity program." Aranson said the following about therapeutic activities:

Arts and crafts allow patients to develop new skills and reactivate old ones, and encourage mobility as an important factor for geriatric patients whose physical abilities are becoming limited. (p. 291)

Because of what Aranson wrote in the above citation, she must have had a favourable attitude toward therapeutic activities.

As mentioned earlier, professionals and paraprofessionals endeavour to inculcate rules, procedures and ethics into the education that is used to prepare individuals to enter a profession. In order to accomplish this objective, these individuals combine several bodies of knowledge into their programs of studies. For instance, the program of study for occupational therapy incorporates, in addition to the liberal arts subjects, medicine, psychology, and



occupations and skills (therapeutic activities). The latter as a subject area has caused considerable debate among occupational therapy educators. But in spite of such debates, O'Sullivan (1955) called for an amalgamation of all subject areas when she wrote:

Occupational therapists could never function adequately without the combination of knowledge of psychological and medical subjects, and occupations and skills. (p. 58)

Jantzen (1958) was even more explicit when she identified "weaving, woodwork, and leatherwork {as} necessary skills of occupational therapists" (p. 80). The obvious emphasis that these authorities have for therapeutic activities is indicative of the high regard that some occupational therapists have for these activities and their positive disposition toward the same.

Shannon (1977) also indicated a positive attitude toward therapeutic activities when she indicated the importance of therapeutic activities. She wrote:

If occupational therapy persists in this direction {rejection of arts and crafts} . . . {its} legitimacy may be revoked and . . . its services absorbed by other health care professions" (p. 233)

### Summary

The above review has attempted to focus on positive statements of opinions by both scholars and leaders of the profession of occupational therapy. The common view shared by these scholars and leaders indicates that therapeutic activities are the sine qua non tools of occupational



therapy. In their assertions, acclamations, statements, and proclamations, these scholars and leaders of occupational therapy whose views are reviewed above displayed a positive attitude toward therapeutic activities.

### Negative Attitudes

While some leaders in occupational therapy are supportive of therapeutic activities, others who take the opposite position continue to look at these activities with what may be considered as unspoken repugnance. It is the opinions of this group of occupational therapy leaders that this subsection will review.

Christiansen (1975) reported a survey by the American Occupational Therapy Association (1974) in which the Association surveyed the attitudes of occupational therapy graduates to determine the relevance of the occupational therapy curriculum. The Association found that occupational therapy graduates were not satisfied with the curriculum that was in place at the time of the study. These graduates were of the opinion that the curriculum was narrow in some areas and obsolete in others. Seventy-seven percent of the respondents recommended that the following courses be included in the curriculum:

Courses dealing with statistics or tests and measurements, advanced neuroanatomy and muscle function, group leadership and personal interaction skills courses, and courses dealing with administration and management skills.  
(p. 354)



It should be noted with regret that the respondents did not mention therapeutic activities despite the popular acclaim that "activities are the sine qua non tool of occupational therapy." Why? It could be speculated that the graduates were satisfied with these activities, except that "47.8 percent of the respondents recommended deletion of the following courses: weaving, art and design courses and minor crafts" (p. 354), all of which are classified by curriculum designers in occupational therapy as therapeutic activity courses. It is the opinion of this researcher that such a recommendation shows a laissez faire attitude toward therapeutic activities if not a negative one.

De-emphasis of therapeutic activities has been reported in the literature of occupational therapy. Mosey (1971), for example, discussed this de-emphasis during the 1942 to 1960 era of the rehabilitation movement. She wrote that occupational therapists borrowed techniques from other disciplines to complement the activities they were using but instead of complementing these activities, proceeded to replace them. There was a shift from therapeutic activities to other techniques. Mosey clarified her position when she said, "Education standards {for occupational therapy students} were revised with a shift away from arts and crafts to basic sciences" (p. 235). There has been (as would be expected) controversy within the profession as to whether de-emphasis of therapeutic activities is an unfortunate trend or a blessing to occupational therapy. Commenting on



this, O'Morrow (1966) wrote:

Some leaders in the profession believe that occupational therapists can make a greater contribution to the patient if they have only a general orientation to a variety of skills . . . and have a strong academic background. . . . Other leaders in the profession feel that the unique value which occupational therapy has had to the patient lies in . . . combination of intellectual, personal and manual skills. (p. 48)

O'Morrow went on to clarify his stand when he said:

It is important to emphasize that the young occupational therapists graduating today must be tested on the basis of their knowledge of human physiological and psychological function and not on the basis of whether they can "sew a fine seam" or "plane a square block." (p. 48)

There would, of course, be nothing wrong in testing the two bodies of knowledge although O'Morrow, like many other occupational therapists from his school of thought, preferred student therapists acquire the physiological-psychological body of knowledge rather than acquiring the psychomotor skills associated with therapeutic activities. This stand is indicative of a negative attitude toward therapeutic activities.

Shannon (1977), in her article entitled "Derailment of Occupational Therapy," discussed the proposition and adoption of "technique hypothesis"--defined as a technique "which views man not as a creative being, capable of choices and directing his future, but a mechanistic creature susceptible to manipulation and control techniques" (p. 233).

Shannon said the following about this hypothesis:



This hypothesis subverts the occupational therapy hypothesis of man using his hands to influence the state of his health. Instead, it advocates the laying of hands principle and rejection of arts and crafts. {This} is derailment from those paradigmatic values and beliefs that legitimized the practice of occupational therapy. (p. 233)

It is obvious that the unidentified proponents of the technique hypothesis are not supportive of the tenet that therapeutic activities are the tools of occupational therapy. Lack of support for this basic tenet portrays a negative attitude toward therapeutic activities.

### Summary

The subsection reviewed the antithesis, negative assertions and proclamations that some leaders and writers in occupational therapy portray toward therapeutic activities. It was hoped that by presenting these antitheses, and these negative inclinations, the reader would begin to feel the tacit diversity of feelings that some occupational therapists have toward therapeutic activities.

### Conceptualization of Therapeutic Activities and Attitudes

The major problem of this study was to identify the attitudes that practising occupational therapists in Kenya had toward therapeutic activities. To complete such a survey without making an attempt to link the concepts of "attitude" and "therapeutic activities" would render this study incomplete.



Therapeutic activities were identified from the onset of the study as the "social object" of study in this investigation. The use or lack of use of these activities in occupational therapy was seen as a function of the nature of the attitudes towards therapeutic activities that are possessed by occupational therapists. Those occupational therapists who are favourably disposed toward therapeutic activities as their treatment media were viewed as having a tendency to seek to use therapeutic activities whereas those in possession of unfavourable attitudes tended to avoid using these activities. The above postulation is in accordance with the position taken by Triandis (1971) when he stated:

The . . . dimensions that underlie behaviour toward any kind of attitude object are *positive* versus *negative affect* and *seeking* (italics in original) versus avoiding contact. . . . any behaviour {therefore} (in brackets mine) can be conceived as involving: (a) a certain amount of seeking or avoiding contact; and (b) a certain amount of positive or negative effect. (p. 12)

Figure 1 shows this conceptualization.

It will be remembered from Chapter I that therapeutic activities are the "basic tools" of operation for occupational therapists. This being so, it would only be simple logic to speculate that therapeutic activities should be placed in the upper quadrant of Figure 1. From the researcher's experience as an occupational therapist, however, therapeutic activities can be placed in quadrants I, II or III, depending on the attitude that an occupational therapist has. Because of their attitudes, the occupational



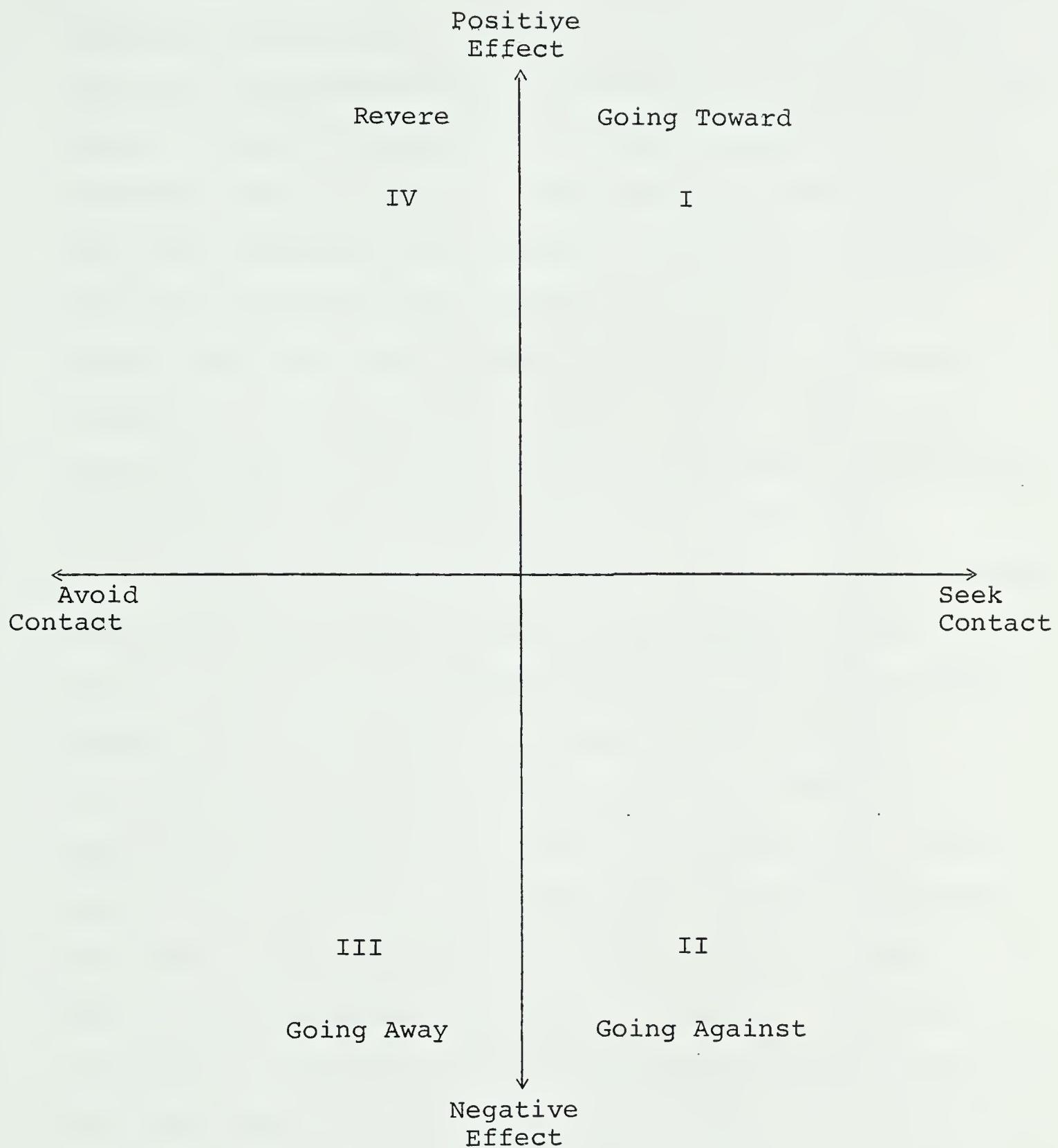


Figure 1 The two basic dimensions of behaviour toward an attitude object. Adopted from Triandis (1971).



therapists may move toward, against, or even away from therapeutic activities. Figure 2 helps illustrate further the above conceptualization. Occupational therapists moving toward therapeutic activities obviously possess favourable attitudes toward the same. The therapists moving against or away from therapeutic activities on the other hand possess negative attitudes toward therapeutic activities. The latter groups are seen by McDonald (1970) as comprising of incomplete occupational therapists. How do these groups form or, rather, how do occupational therapists acquire the attitudes they have toward therapeutic activities?

Oskamp (1977) contends that "attitude formation, the step from no attitude to some attitude toward a given object" (p. 138) is a learned activity. This author delineated five ways in which attitudes may be acquired: "1) Genetic and physiological factors, 2) direct personal experience, 3) parental influence, 4) groups, and 5) mass media" (pp. 120-123). An occupational therapist acquires attitudes toward therapeutic activities from all these ways. Direct personal experiences and groups as a means of acquiring attitudes for occupational therapists override all other means of attitudinal acquisition. This occurs in a multiplicity of ways.

The first and foremost influence on the formation of attitudes emanates from the pressure originating from schools of occupational therapy. The students in these



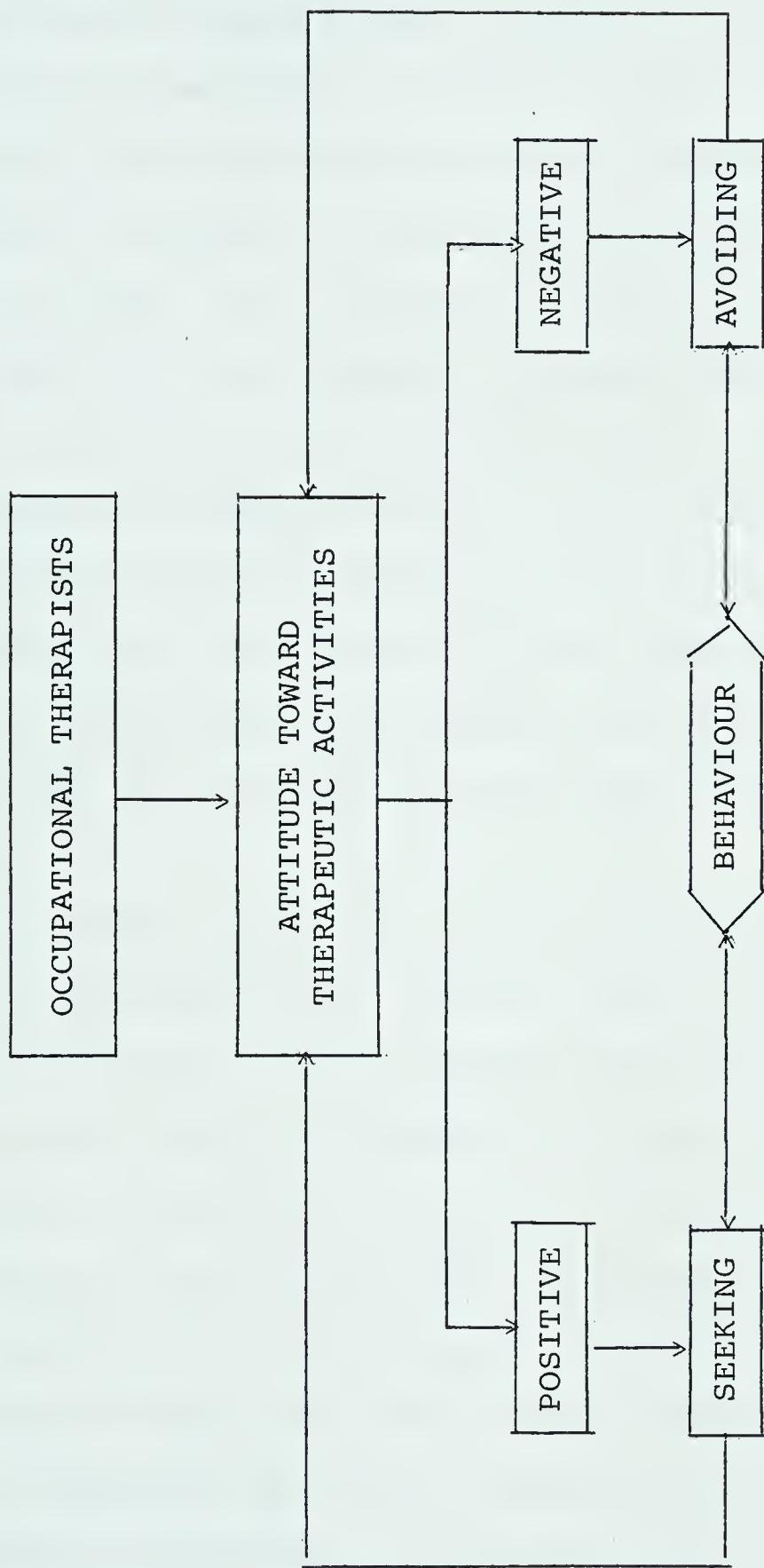


Figure 2 A diagrammatical illustration of the attitudes of occupational therapists and their resultant behaviour.



schools are indoctrinated to believe and accept the fact that therapeutic activities are the only medium of treatment appropriate for occupational therapy. The professional socialization incurred in schools inculcates into the students all the salient beliefs about therapeutic activities. "A person's attitude," according to Fishbein and Ajzen (1975, p. 222), "is a function of his salient beliefs." This being so, the students of occupational therapy are bound to possess very favourable attitudes toward therapeutic activities upon graduation. But do these professionally socialized graduates continue to believe in therapeutic activities even after years of direct personal experiences with the activities? The answer to this question is yet to be provided by either writers or researchers in occupational therapy.

Another significant source of influence of attitudes is the peer group. Ostrom (1968), citing Newcomb's study, said that, "To the extent individuals continued to interact with those friendship . . . peer groups within which they formed their attitudes, the acquisition of new information {has} little effect on those attitudes" (p. 13). Unfortunately, for the graduates of occupational therapy, they have to work with others within the medical and paramedical community who do hold contrary attitudes toward therapeutic activities. If Ostrom's postulate is to be used as a basis for argument, it can be safely argued that the coworkers of occupational therapists will tend to have



significant effect on the occupational therapist's attitude toward therapeutic activities. This definitely puts an occupational therapist in a dilemma. Will the therapist denounce therapeutic activities in order to enjoy the "recognition and security {provided} by the working community {other paramedical and medical personnel}" (Ostrom, p. 13), or will the therapist continue to use these activities and sacrifice the personal recognition and security provided by the working community?

Within the working community, there appears to be a continuous struggle for recognition, status, and prestige. The members of this community constantly evaluate various aspects of their work and consciously or unconsciously compare those aspects with those of other disciplines. The results, whether in their favour or not, are distorted to fit their expectations which are obviously in their favour. Within the hospital setting where occupational therapy is extensively used together with other medical and paramedical disciplines, the occupational therapist is at a disadvantage when these other disciplines are critical of his/her "tools of operation" as the criteria for discipline status, prestige or recognition. Other medical personnel are critical because occupational therapists utilize normal everyday tools and materials to attain the treatment goals which are prescribed by a physician. Spoons, knives, saws, rakes, timber, cane, metal, looms, benches, wool, clay, and sisal are just a few items and materials that are used in treating



patients. These items and materials are seen by personnel of other medical disciplines as too ordinary to belong to the prestigious medical profession. Their (occupational therapists') prestige is underscored. Triandis (1977) saw prestige as one of the "outputs" expected by workers who bring to the working environment the same "inputs" (education, experience). It is therefore only proper for occupational therapists to expect the same prestige. If they attribute lack of prestige to therapeutic activities, their response to the same can be expected to be mixed.

Occupational therapy is even more disadvantaged in developing countries like Kenya (the site of this study) because medical personnel in these countries are still chemotherapy oriented and continue to see medicine in its long passed era of "tablet and injection treatment". Furthermore, the focus of the medical professions in these countries is on the acute and deadly medical problems which inevitably call for nothing short of the antibiotic.

Shannon (1977) referred to the latter focus as the medical model of medicine. She said that, "The medical model of medicine . . . precludes a concern for chronicity and has its focus instead . . . {on} acute care" (p. 232). This is a very unfortunate focus as far as occupational therapists are concerned for it subtly ignores the chronically ill and disabled patients whom occupational therapists endeavor to treat and rehabilitate. As a result, occupational therapists are left with feelings of dissatisfaction with their treatment modality which they blame as being inadequate in



the management of the acute patients--the central focus of the medical services which they (occupational therapists) are paid to be members of. The feelings of inadequacy and hence dissatisfaction can be a very punishing experience and may ultimately result in unfavourable feelings toward therapeutic activities. Triandis (1971) noted:

When a person experiences a rewarding state of affairs in association with an attitude object, his affect toward the object will become more favourable. Conversely, if the experience is punishing, the person will change his affect in a negative direction. (pp. 6-7)

#### Professionalism in Occupational Therapy

All occupations and semi-professions are aspirants of professional status. Occupational therapy is no exception. Occupational therapists have been striving toward the concept of professionalism since the founding of occupational therapy.

Lynn (1965) briefly discussed what it means to be professionalized in his book, The Professions in America. This author wrote:

The earliest meaning of the adjective "professed" was this: "That has taken vows of a religious order." By 1675, the word was secularized thus: "That professes to be duly qualified; professional." "Profession" originally meant the act or fact of professing. It has come to mean: "The occupation which one professes to be skilled in and follow . . . . A vocation in which professed knowledge of some branch of learning is used in its application to the affairs of others, or in the practice of an art based upon it." (p. 2)



Contemporary definitions, however, are inductive in nature. They have consisted of an examination of the defined characteristics of a profession. The number of these characteristics varies from one author to another. For instance, Schein (1972) identified ten characteristics. Palvolko (1971) identified eight while Miskel and Hoy (1978) identified five. These authors represent the same view of professions in spite of the variation of the number of the characteristics.

How is occupational therapy faring in meeting the characteristics of a profession? Reed and Sanderson (1979) answered the question in their attempt to analyze the ten characteristics of professionalism given by Schein (1972) with respect to occupational therapy. These authors wrote:

The profession of occupational therapy appears to meet criteria {characteristics} 1, 6, 8, and 10. These include the full time employment as an occupational therapist, the service as based on the objective needs of the clients, the existence of a professional association and lack of advertisement. (p. 163)

From the citation above, it is clear that six of the ten criteria listed by Schein are not being met in the practice of occupational therapy. This shortcoming could be interpreted to mean that occupational therapy is not professional enough to meet all of the criteria listed for an occupation to be categorized as "professional." But literature further reveals that even the full-fledged professionals--doctors and lawyers--do not meet all the criteria of professionalism. Etzioni (1969) referred to these two so called "professions"



as semiprofessions. He said:

Their training is shorter, their status is less legitimized, their right to privileged communication less established, there is less specialized body of knowledge, and they have less autonomy from supervision or society control than "the" professionals. (p. v)

Failure to meet the criteria of professionalism for occupational therapy, like other paramedical professions, was further elaborated upon by Freidson (1970) when he stated:

Those paramedical occupations which are arranged around the physician cannot fail to be subordinate in authority and responsibility and, so long as their work remains medical in character, cannot gain occupational autonomy no matter how intelligent and aggressive its leadership. To attain the autonomy of a profession, the paramedical occupation must control a fairly discrete area of work that can be separated from the main body of medicine and that can be practised without routine contact with or dependence on medicine. Few if any of the present paramedical occupations deal with such potentially autonomous areas. (p. 69)

Palvolko (1971) cited occupational therapy as an example of a profession experiencing incomplete professionalism when this author wrote:

The physician's prescription has remained, however, as a symbol of his control over treatment and is an apparently thorny reminder of the occupational therapist's subordinate status. (p. 36)

Occupational therapists are not happy with the subordinate status. In United States particularly, they are presently engaged in a fight for professional autonomy. Unless these occupational therapists win this fight and thus set a precedent to their counterparts in other parts of the world, it



will be extremely difficult for occupational therapy to realize the full status of a profession.

#### Related Studies

A review of related studies that were directed toward researching attitudes toward various objects was accomplished using the data base of the Educational Information Centre (ERIC). In conducting this search the following descriptors were used: community attitudes, family attitudes, educational attitudes, social attitudes, work attitudes, and changing attitudes. A manual search was also made of Dissertation Abstract International. These two searches revealed a multiplicity of attitudinal studies. There was, however, no study directly related to occupational therapy or the attitudes that occupational therapists have toward therapeutic activities. The studies that are presented here were considered to be closely related to the current study in terms of methodology used and/or that the results of the research had implications for the current study.

Roy (1972) conducted a study to determine the attitudes of student teachers at the University of Alberta enrolled in Education Practica 301, 350, 400 and 450 toward their teaching practice. He asked the 158 respondents to indicate the degree of favourable or unfavourable attitude that they held toward aspects of their student teaching experience. This investigator used items adopted from a



questionnaire developed by Whooley (1969) entitled "Attitudes of Student Teachers Toward One's Student Teaching Experience." The results of this research indicated that the respondents enrolled in 400 and 450 had the greatest degree of favourable attitude toward all aspects of their student teaching experiences. The students enrolled in 400 (integrated) showed the most favourable attitudes; while those students enrolled in 301, 350, and 400 (discrete) indicated less favourable attitudes toward several aspects of their student teaching experience.

In a study aimed at determining the attitudes of pupils, parents, teachers and school administrators toward corporal punishment, Shalka (1973) randomly sampled 252 pupils, 84 teachers, and 42 administrators from 42 randomly selected schools in the Edmonton Public School System. He developed a pupil, parent, and teacher or administrator inventory to gather data for his research. The findings of this investigation revealed a favourable attitude toward corporal punishment. Shalka wrote:

In general, the attitudes of pupils, parents, teachers, and administrators in Edmonton Public School System were favourable toward strapping {corporal punishment} of pupils in schools.  
(p. 127)

In 1974, Hanson conducted a study titled "Authoritarianism and Attitudes Toward Mental Patients." This researcher administered "Custodian Mental Illness Ideology Scale" (measuring custodialism/humanism), a "Tranquilizer Scale" (measuring attitudes toward administering tranquilizers to



mental patients), and "The F Scale" (measuring authoritarianism) to 52 nurses at a large mental hospital. The following research hypotheses were tested:

1. There would be a positive correlation between custodialism and authoritarianism;
2. There would be positive correlation between custodialism and favourable attitudes toward the administration of tranquilizers to mental patients; and
3. There would be a positive correlation between authoritarianism and favourable attitudes toward administration of tranquilizers to patients.

The data from this study supported hypotheses one and two.

Brown (1974) investigated the medical professionals' attitude toward the prospective use of physicians assistants in the state of New Jersey. Pretested questionnaires were sent to 7,486 members of the medical society of New Jersey. Three hundred seventy one (371) randomly selected questionnaires were analyzed out of the 1400 returned. In addition, 20 medical and health professionals were interviewed. The results were indicative of favourable attitude toward physician assistants.

Attitude studies toward the care and/or treatment of the aged pervade the field of gerontology. One such study was conducted by Garfunkel (1975). This researcher surveyed the attitudes of psychiatrists, psychologists, social workers and students toward aging. The results showed a generally favourable attitude toward the subject of study.



In another study using physicians as subjects, Miller, Lowenstein, and Winston (1976) conducted a survey to ascertain physicians' attitude toward the ill aged. Three hundred two (302) physicians in private practice (exclusive of pediatricians) from a medium sized suburban city in the New York Metropolitan area comprised the population of this study. The findings demonstrated generalized disinterest in the care of the ill aged patients in institutions.

Fandetti and Gelfand (1972) also conducted an attitudinal study toward the care of the aged. They randomly sampled 100 Baltimore residents of Italian and Polish descent to determine their attitudes toward the care of their aged relatives. Interviews were used to collect data for the study. The results demonstrated a preference for inter-generational household arrangements for ambulatory relatives, a preference for church rather than governmentally operated services, and a positive attitude toward well trained nonethnic professional caretakers.

In another area of study, Moshier (1977) investigated the expressed attitudes of child caregivers toward parent involvement in day care centres. This investigator randomly selected child care centres located in the metropolitan area of Nashville, Tennessee. One hundred seventy two (172) care givers composed the population for this study. The data for this study were obtained through a questionnaire entitled "Care Giver Attitude Inventory," a slightly modified version of Schaefer's "Home School Inventory (Teacher's Version)."



The questionnaires were distributed to caregivers in their centres and interviews were held with each director.

Questionnaire data were statistically treated by means of a one-way analysis of variance and t-test. The results revealed that the caregivers who had high contact with parents had significantly more positive attitudes toward parent involvement than those with low contact with the parents. In general, the attitudes of the caregivers toward parent involvement was fairly positive.

Finally, Ogunleye (1980) conducted a study in Alberta to determine the attitudes of occupational therapists and physiotherapists toward role autonomy. This researcher gathered his data from registered active members of the Alberta Association of Registered Occupational Therapists and the Association of Chartered Physiotherapists of Alberta through a self-administered questionnaire. The results showed that occupational therapists had positive attitude toward role autonomy. Physiotherapists' attitude, on the other hand, was marked by a lower preference for role autonomy.

#### Summary of the Chapter

This chapter was divided into four main sections--attitudes, therapeutic activities, professionalization in occupational therapy, and related studies. Under attitude and therapeutic activities sections, several subsections were covered.



Under the section on attitudes, the theory of attitudes was briefly reviewed, i.e. the definition, functions and components. A conceptual framework which attempted to link the concepts of attitudes and therapeutic activities was developed.

The rest of the chapter was devoted to developing a general understanding of the relationship between therapeutic activities and occupational therapy.

The chapter was concluded with a review of attitudinal studies.



## CHAPTER III

### ANALYSIS OF DATA

The preceding chapter presented a review of literature pertinent to occupational therapy and the concept of attitude. A conceptual framework which sought to link the concept of attitude to occupational therapists with reference to therapeutic activities was also presented.

Chapter III is directed at the analysis of the data obtained from the returned usable research questionnaires. Questionnaires were considered usable only if the respondents completed all sections of the questionnaire. Two (4.4%) of the 45 (66.2%) questionnaires returned, out of the 68 that were mailed to the members of the research population were considered unusable.

The data are presented in tabular form for ease of analysis and interpretation. Note that the percentages may not add to 100 due to rounding.

#### Procedures Used to Analyze Data

The data from each questionnaire were coded and punched on 80 column IBM cards. The analysis was facilitated by the use of programs and subprograms contained in SPSS--Statistical Package for the Social Services (Nie, Hull, Jenkins, Steinbrenner, and Brent, 1975).



It will be remembered from Chapter I that Section C of the research questionnaire consisted of 15 negative and 15 positive statements. The negative statements were treated to reverse scoring in order to ensure uniformity in scoring of the responses and relating them to the nature of attitudes indicated by the respondents. For the 15 positive statements, the scoring was as follows:

Strongly Agree	5
Agree	4
Undecided	3
Disagree	2
Strongly Disagree	1

The 15 negative statements on the other hand were scored as follows:

Strongly Agree	1
Agree	2
Undecided	3
Disagree	4
Strongly Disagree	5

### Specific Analysis of Data

#### Section A

In Section A of the research instrument there were five closed-ended questions that were used to collect background information from each respondent, the institution where each worked, and the type of patients that were treated. Means, standard deviations, and percentages were used to describe the data that were obtained through this section. The data are presented in frequency distribution tables.



### Distribution of the Participants by Sex

The first item on Section A of the questionnaire sought the participants' sex.

Data in Table 3.1 presents the sex categories of the respondents. These data show that 29 men made up 67.4% of the respondents and that 14 female occupational therapists comprised the remaining 32.4% of the research participants.

### Distribution of the Participants by Age

Data in Table 3.2 show the age groups for the occupational therapists who elected to be participants in this study. These data indicate that most occupational therapists (86%) who participated in the research were between the ages of 21 and 32 years at the time of the study.

### Distribution of the Respondents by Years of Experience in Occupational Therapy Practice

The experience levels of occupational therapy practice for the participants of the study are given in Table 3.3. Data in this table indicate that most participants (58.1%) had one to three years experience in occupational therapy practice. Eight occupational therapists (18.6%) indicated that they had eight or more years of experience in this profession.



Table 3.1  
Number and Sex of Respondents

Sex	Number	%
Male	29	67.4
Female	14	32.4
Total	43	100.0

N = 43

Table 3.2  
Age and Number of Respondents

Age Group	Number	%
21-26	22	51.2
27-32	15	34.9
33-38	5	11.6
39-44	1	2.3
Total	43	100.0

N = 43



Table 3.3  
Distribution of Respondents by  
Years of Experience

Years of Experience	Number of Occupational Therapists	%
1 Year or less	13	30.2
2 - 3 years	12	27.9
4 - 5 years	5	11.6
6 - 7 years	5	11.6
8 - 9 years	7	16.3
18 and over	1	2.3
Total	43	100.0

N = 43



### Distribution of the Respondents by Location

In Table 3.4 are data which indicate that over half of the respondents of the research questionnaire (62.8%) practised occupational therapy in urban hospitals. The remaining respondents (37.2%) were practising occupational therapists in hospitals that were spread out throughout rural Kenya. This confirms the investigator's assertion in Chapter I that occupational therapy service in Kenya is primarily provided in hospitals that are located in the main population centres rather than hospitals that are located outside these centres.

### Disabilities Treated by the Respondents

Means and standard deviations for the three disabilities listed in Section A of the questionnaire were computed to determine the type of disability most frequently treated by occupational therapists who participated in this research. These statistics are included in Table 3.5.

Data in this table show a rank order for the disabilities that the 43 participants treated. These data show that the participants engaged in the treatment of physical disabilities, pediatric disabilities, and psychiatric disabilities in that order.



Table 3.4

Distribution of Respondents by  
the Location of Their Place of Work

Location	Number of Occupational Therapists	%
Urban	27	62.8
Rural	16	37.2
Total	43	100.0

N= 43

Table 3.5

Disabilities Treated by the  
Respondents

Disability	Mean	Standard Deviation
Physical Disabilities	2.25	0.78
Paediatric Disabilities	2.12	0.73
Psychiatric Disabilities	1.82	0.91

N = 43



### Section B

Section B of the research questionnaire was designed to identify the roles that occupational therapists in Kenya perceived themselves as performing during a forty hour work week. The following roles were listed: treatment, administration/supervision, teaching, consultation, evaluation, clinical practice, and research. The participants were requested to indicate against each role the number of hours they spent performing that specific role during the forty hour work week. Tables 3.6 to 3.12 include data which represent the distribution of hours for each of the roles.

The data in Table 3.6 show that two occupational therapists (4.7%) were not involved in providing any type of treatment to patients at the time of the study. Thirty-four of the 43 occupational therapists (79.2%) spent half their working week performing treatment to patients who were either physically dysfunctional or psychologically dysfunctional. Only two occupational therapists (4.7%) spent between 36 to 40 hours performing treatment.

The data in Table 3.7 indicate that of the 43 occupational therapists who participated in this study, 31 therapists (72.1%) spent five hours or less in administrative/supervisory roles. Four respondents (9.3%) spent between 16 to 30 hours performing in this role.

The data in Table 3.8 show the amount of time the participants spent in the teaching role. These data show that 31 of the 43 respondents or 79.1 percent of the



participants spent five hours or less in teaching.

Table 3.9 includes data which indicate that 93 percent of the respondents of the research questionnaire devoted five or less hours performing consultative work. Only one therapist (2.3%) devoted between 11 or 15 hours performing responsibilities that were consultative in nature.

The data in Table 3.10 indicate that out of the 43 respondents, only 11 or 25.6 percent did not devote any working time to evaluation. The remaining 32 respondents or 74.4 percent indicated that they spent amounts of time that ranged from less than one hour to as high as 20 hours.

The data in Table 3.11 indicate that 13 respondents or 30.2 percent indicated that they were not involved in clinical supervision of occupational therapy students. The remaining 30 respondents or 69.8 percent indicated they were involved in clinical supervision in varying amounts of time ranging from less than one hour to 35 hours per week.

Data in Table 3.12 show that participants spent a minimum amount of their forty working hours in research or research related activities. Eighteen respondents or 41.9 percent did not expend any time performing research responsibilities while the remaining 25 or 58.1 percent of the participants spent five hours or less performing responsibilities that were related to research activities.

It can be concluded from the data shown in the above seven tables (Tables 3.6 to 3.12) that the participants



devoted more time, on the average, to treatment (mean = 21 to 25 hours of a 40 hour work week) than to any of the other six roles. Of the seven roles, research was performed the least.

### Section C

This section of the research instrument was designed to identify the attitudes that Kenyan occupational therapists had toward therapeutic activities. Such descriptive statistics of means, standard deviations, and correlations were computed for each of the 30 statements comprising Section C. T-tests were also performed to test the null hypotheses of no significant differences.

The means for the 30 statements in Section C ranged from 1.2 to 4.4 with standard deviations for these statements ranging from 0.4 to 1.6. The grand mean ( $G\bar{X}$ ) for the 30 statements concerned with activities was 4.1 with a standard deviation of 0.5. Data in Table 3.13 show the means and standard deviation for the 30 items of Section C. The grand mean and its standard deviation is shown in this table on the row of totals.

### Factor Analysis

A factor analysis was performed for the 30 statements to determine the degree to which any given statement or several statements were a part of a common underlying phenomenon or characteristic (Nie et al., 1975, p. 480). In



performing this factor analysis, the investigator wished to determine whether there were identifiable dimensions which could be used to describe the nature of attitudes held by occupational therapists toward the use of therapeutic activities as treatment media. Nie and his associates described the factor analysis procedure in this way:

{It} is a . . . procedure for locating and defining dimensional space among a relatively large group of variables. . . . {Its} major use is to locate a smaller number of valid dimensions, clusters, or factors contained in a larger set of independent items or variables. . . . {It} can help determine the degree to which a given variable or several variables are a part of a common underlying phenomenon. (p. 10)

By placing the items or statements into smaller numbers of valid dimensions, construct validity of the research instrument is immensely improved.

In conducting a factor analysis, some items load on a given factor heavily while others achieve only a minimal factor loading. Only those items that have a reasonably high factor loading should be considered under the particular factor. But what is a reasonably high factor loading? Before answering this question, it needs to be noted that a factor loading is a correlation coefficient of the item or statement with the factor (Guilford and Fruchter, 1978; Popham, 1973; Thorndike and Hagen, 1969). It therefore follows that a particular item or statement with a high factor loading on a particular factor has a strong correlation with the factor. Needless to say then, a factor analyst would only choose what he or she considers to be a relatively



Table 3.6  
Distribution of Working Hours to Treatment

Number of Hours	Number of Occupational Therapists	% of Occupational Therapists
Less Than 1	2	4.7
1 - 5	3	7.0
6 - 10	0	0
11 - 15	4	9.3
16 - 20	3	7.0
21 - 25	7	16.3
26 - 30	12	27.9
31 - 35	10	23.3
36 - 40	2	4.7
Total	43	100.0

N = 43



Table 3.7

Distribution of Working Hours to  
the Role of Administration/Supervision

Number of Hours	Number of Occupational Therapists	% of Occupational Therapists
Less Than 1	18	41.9
1 - 5	13	30.2
6 - 10	4	9.3
11 - 15	4	9.3
16 - 20	3	7.0
21 - 25	0	0
26 - 30	1	2.3
31 - 35	0	0
36 - 40	0	0
Total	43	100.0

N = 43



Table 3.8  
Distribution of Working Hours to  
the Role of Teaching

Number of Hours	Number of Occupational Therapists	% of Occupational Therapists
Less Than 1	21	48.8
1 - 5	13	30.2
6 - 10	7	16.3
11 - 15	1	2.3
16 - 20	1	2.3
Total	43	100.0

N = 43



Table 3.9  
Distribution of Working Hours to  
the Role of Consultation

Number of Hours	Number of Occupational Therapists	% of Occupational Therapists
Less Than 1	19	44.2
1 - 5	21	48.8
6 - 10	2	4.7
11 - 15	1	2.3
Total	43	100.0

N = 43



Table 3.10

Distribution of Working Hours to  
the Role of Evaluation

Number of Hours	Number of Occupational Therapists	% of Occupational Therapists
Less Than 1	14	32.6
1 - 5	10	23.3
6 - 10	10	23.3
11 - 15	8	18.6
16 - 20	1	2.3
Total	43	100.0

N = 43



Table 3.11

Distribution of Working Hours to  
the Role of Clinical Supervision

Number of Hours	Number of Occupational Therapists	% of Occupational Therapists
Less Than 1	21	48.8
1 - 5	9	20.9
6 - 10	7	16.3
11 - 15	2	4.7
16 - 20	1	2.3
21 - 25	1	2.3
26 - 30	1	2.3
31 - 35	1	2.3
Total	43	100.0

N = 43



Table 3.12  
Distribution of Working Hours to  
the Role of Research

Number of Hours	Number of Occupational Therapists	% of Occupational Therapists
Less Than 1	32	74.5
1 - 5	11	25.6
Total	43	100.0

N = 43



Table 3.13

Means and Standard Deviations of  
 the 30 Statements Comprising Section C  
 of the Questionnaire

Statement Number	Mean	Standard Deviation
1	4.7619	0.4311
2	3.6744	1.6579
3	4.3721	1.0696
4	3.8372	1.1737
5	4.1163	1.0284
6	4.0698	1.1422
7	4.2326	1.2505
8	4.3488	0.9731
9	4.0698	1.1831
10	3.6047	1.3997
11	3.9767	1.0799
12	3.9762	1.2195
13	3.7674	1.2313
14	4.2558	1.0257
15	3.7857	1.3887
16	4.0930	1.1087
17	4.4419	0.7336
18	3.1667	1.3954
19	4.1905	0.8900
20	3.9535	1.0455
21	3.7209	1.4528
22	4.3953	0.8767
23	4.0698	0.9855
24	4.3953	0.6597
25	4.4048	0.7670
26	4.2326	1.1305
27	4.4419	0.8253
28	4.2326	1.0654
29	4.2558	1.0257
30	4.2558	1.1971
Total	4.1041	0.5540

N = 43



Table 3.14

Varimax Rotated Factor  
Matrix Section C - 30 Items

Item Number	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
1	-0.04594	0.01590	-0.03874	0.00789	0.60203*
2	0.12013	-0.33435	-0.16838	0.24539	-0.25139
3	0.44802*	-0.07990	-0.09409	0.06087	-0.01471
4	0.59436*	-0.15209	0.13440	0.02306	-0.17440
5	0.03543	0.29214	0.80240*	0.00264	-0.16355
6	0.29299	0.16264	0.71371*	0.13898	-0.06845
7	0.54672*	0.04926	0.58567*	-0.08763	0.12397
8	0.62778*	-0.29116	0.51428*	0.09602	0.26926
9	0.75987*	0.07043	-0.10515	0.29804	0.22817
10	0.74539*	0.42184*	0.11391	-0.08619	-0.12337
11	0.59806*	0.14578	0.25133	0.23793	0.01594
12	0.60536*	-0.05877	0.16940	-0.10118	-0.29325
13	0.37005	0.61142*	0.02036	0.11036	0.10559
14	0.16316	0.45621*	-0.10111	0.34022	0.39991
15	0.62837*	0.27646	0.35628	0.21733	0.10619
16	0.02776	0.69803*	0.00376	0.07293	-0.07806
17	0.60400*	0.14142	0.36593	-0.12842	-0.17374
18	0.51994*	0.28668	0.21502	-0.13887	0.30445
19	-0.04156	0.23902	0.03234	0.01513	0.03960
20	0.19276	0.54410*	0.06084	0.54395*	0.02739
21	0.71066*	0.51893*	0.10478	-0.04165	-0.16978
22	0.55896*	0.35087	0.05111	0.19895	0.12285
23	0.25696	0.66058*	0.06954	-0.00656	-0.01327
24	0.16313	-0.02145	0.11542	0.75403*	-0.15100
25	-0.03220	0.16956	0.19890	0.90837*	0.24961



Table 3.14 (cont'd)

Item Number	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
26	0.73796*	0.19965	-0.04383	0.19376	0.15799
27	-0.00407	-0.06162	0.54958*	0.25657	-0.00411
28	0.55301*	0.18275	-0.18232	0.19578	0.24220
29	0.40465*	0.17822	-0.38893	0.20515	-0.15006
30	0.71485*	0.04969	0.17015	0.02584	-0.16360
<hr/>					
Sum of Squares	11.86	5.73	4.46	4.55	1.09
Percentage of Common Variance	52.3	16.0	13.4	11.3	7.0

\* Factor loading  $\geq .40$ .



strong relationship. It is at the discretion of the factor analyst to determine the acceptable level of factor loadings. For this study, factor loadings greater than or equal to .40 were accepted as reasonably high.

Data in Table 3.14 show the factor loadings of the 30 items comprising Section C of the research instrument. The table also indicates the manner in which the items clustered around five dimensions.

### The Factors

As mentioned earlier, the 30 items clustered on five factors. The factors are described here below.

#### Factor 1

Data in Table 3.15 show that there were 17 items clustered under Factor 1. The sum of squares--a measure of corresponding function with the eigen value of the unrotated varimax--i.e., "a measure of relative importance of the function" (Nie et al., p. 442)--indicated that Factor 1 was of utmost importance in exploring the attitudes of occupational therapists. It had a sum of squares of 11.86 with a 52.3 percent variance.

Table 3.15

The 17 Items Comprising Factor 1 and  
Their Corresponding Factor Loadings

Item Number	Statement	Factor Loading
3.	An occupational therapist can operate optimally without any knowledge of therapeutic activities.	0.44802
4.	I find therapeutic activities very enjoyable.	0.59436

(cont'd...)



Table 3.15 (cont'd)

Item Number	Statement	Factor Loading
7.	An occupational therapist should be competent in a wide range of therapeutic activities.	0.54672
8.*	Therapeutic activities are of very little help to patients.	0.62778
9.*	Therapeutic activities are busy work and should be substituted immediately.	0.75987
10.*	If I had a choice, I would never use therapeutic activities.	0.75987
11.	Therapeutic activities have more advantages than disadvantages.	0.59806
12.*	The affluent society needs drugs and sophisticated medical equipment for treatment and not simple therapeutic activities.	0.60536
15.*	Therapeutic activities should be dropped first if for any reason a subject was to be dropped from the occupational therapy curriculum.	0.62837
17.*	Taking courses in therapeutic activities is a waste of time and energy on the part of occupational therapy students.	0.60400
18.*	Most therapeutic activities taught in occupational therapy are menial and therefore not appropriate for people from high social economic status.	0.51994
21.*	Use of therapeutic activities lowers the status of the occupational therapy profession.	0.71066
22.	Successful completion of tasks (therapeutic activities) brings pleasurable feelings to patients, which is non-existent in other medical areas.	0.55896
26.*	Local arts and crafts cannot be utilized therapeutically in occupational therapy.	0.73796

(cont'd...)



Table 3.15 (cont'd)

Item Number	Statement	Factor Loading
28.	Therapeutic activities are best predictors of the future work performance of the physically or mentally disabled clients.	0.55301
29.*	Considering that most of an occupational therapist's time is spent in learning and performing therapeutic activities, I would not recommend the profession to students of high ability.	0.40465
30.	In spite of criticism from other medical personnel, I still believe in therapeutic activities.	0.71485

\* Reflected Item.

Analysis of these 17 items revealed that these items tended to be "evaluative" in nature. The dimension (Factor 1) was therefore labelled "Evaluation of therapeutic activities dimension."

To justify the clustering of the items, Pearson correlations among Factor 1 items were performed. Table 3.16 shows the intercorrelations of the 17 items that were placed in the factor classified as "evaluation of therapeutic activities."

#### Factor 2

Of the 30 items from Section C of the questionnaire, seven were placed under Factor 2 with a sum of squares value of 5.73 and a variance of 16.0 percent. Data from Table 3.17 show the items comprising Factor 2.



Table 3.16  
Intercorrelation Matrix of Items  
on Evaluation Dimension (Factor 1)

Items	3	4	7	8	9	10	11	12	15	17	21	22	26	28	29	30
3	.4287**	.3610**	.4214**	.1860	.1165	.2757*	.2478	.3456*	.1496	.2370	.2203	.1630	.3610**	.3452*	.2214	
4		.3833**	.6346***	.4370**	.4092**	.3703**	.4290**	.4981***	.2791*	.3078*	.3186*	.2266	.2214	.1541	.3184*	
7			.6557***	.2302	.4075**	.4802***	.4730***	.3527*	.4730***	.5601***	.4166**	.3702**	.3987**	.2980*	.-0.0475	.4047**
8				.4127**	.2435	.4837***	.3124*	.6097***	.3793*	.2221	.4485***	.2925*	.3562**	.-0.0438	.4735**	
9					.5778***	.4486***	.3352*	.4349**	.4023**	.5518***	.4778***	.6284***	.5646***	.3577**	.4746***	
10						.4349**	.3908**	.4285**	.4756***	.7524***	.3439*	.5410***	.2707*	.3707**	.4739***	
11							.2487	.6755***	.3439*	.5262***	.3872**	.4531***	.3152*	.2850*	.3362*	
12								.3479*	.5533***	.4860***	.4167**	.4589***	.2457	.0822	.6176***	
15									.4016**	.4970***	.5262***	.4620***	.3430*	.2238	.2934*	
17										.5652***	.3513**	.4186**	.3528**	.1623	.5460***	
21											.4065**	.6348***	.3044*	.3526***	.5486***	
22												.5056***	.4955***	.1232	.4005**	
26													.4285**	.3376*	.6412**	
28														.3800**	.3620**	
29															.2169	
30																

Key: \*\*\* P ≤ .001; \*\* P ≤ .01; \* P ≤ .05.



Table 3.17

The Seven Items Comprising Factor 2  
and Their Corresponding Factor Loadings

Item Number	Statement	Factor Loading
10.*	If I had a choice, I would never use therapeutic activities.	.42184
13.*	Occupational therapists should de-emphasize therapeutic activities.	.61142
14.	Interpersonal relationships of withdrawn patients can be improved through the use of therapeutic activities.	.45621
16.	The very best method to evaluate work tolerance for the disabled is through the use of therapeutic activities.	.69803
20.	I feel fairly confident in administering therapeutic activities.	.54410
21.*	Use of therapeutic activities lowers the status of occupational therapy profession.	.51893
23.	I choose therapeutic activities for my treatment goals after I have completely exhausted all other means of treatment.	.66058

\*Reflected Item.

These items comprising Factor 2 were seen as items focusing specifically on the importance of therapeutic activities toward the uniqueness dimension of the profession. The factor was given the title "Role of Therapeutic Activities Toward the Uniqueness of Occupational Therapy."

A Pearson correlation was performed to examine the strength of the interrelationships between the seven items. Table 3.18 shows the intercorrelation matrix.



Table 3.18  
Intercorrelation Matrix of Factor 2 Items

Items	Items						
	10	13	14	16	20	21	23
10		.4427***	.1716	.3311*	.3126*	.7524***	.4520***
13			.5950***	.4871***	.5093***	.5219***	.4257**
14				.4183**	.5220***	.2568*	.2881*
16					.5584***	.2678*	.3426*
20						.4458***	.3267*
21							.6292***
23							

Key: \*\*\*  $P \leq .001$ ; \*\*  $P \leq .01$ ; \*  $P \leq .05$ .



### Factor 3

Items 5, 6, 7, 8, and 27 clustered together to form Factor 3. The sum of square value and the percentage of variance for this factor were 4.46 and 13.4 percent, respectively. In Table 3.19 are data with the five items that were placed under factor 3. The factor loadings for each item is also shown.

Table 3.19

#### Factor 3 Items and Their Corresponding Factor Loadings

Item Number	Statement	Factor Loading
5.	Involvement in therapeutic activity programmes hastens patient's discharge from hospital.	.80240
6.*	Use of therapeutic activities is a suitable exploitation of patients.	.71371
7.	An occupational therapist should be competent in a wide range of therapeutic activities.	.58567
8.*	Therapeutic activities are of very little help to the patients.	.51428
27.	Participation in therapeutic activities influences the patient's state of mental health.	.54958

\*Reflected Item.

Examination of the items comprising this factor revealed a general dimension which was directly related to the clients of occupational therapy. The dimension was labelled as "The effects of therapeutic activities on patients."



Table 3.20

## Intercorrelation Matrix of Factor 3 Items

Items	Items				
	5	6	7	8	27
5		.5605***	.5339***	.4344**	.4430***
6			.6218***	.5132***	.4465***
7				.6557***	.1980
8					.3075*
27					

Key: \*\*\*  $P \leq .001$ ; \*\*  $P \leq .01$ ; \*  $P \leq .05$ .



To further examine the relatedness of these items, Pearson correlations were performed on these five items. The intercorrelations for each of these items is shown in Table 3.20.

#### Factor 4

Factor 4 was composed of three items from the research questionnaire. They were items 20, 24, and 25. These items had a sum of square value of 4.55 with an 11.3 percent variance. These three items and their factor loadings comprise the data found in Table 3.21.

Table 3.21  
Factor 4 Items and Their Corresponding Factor Loadings

Item Number	Statement	Factor Loading
20.	I feel fairly confident in administering therapeutic activities.	.54395
24.	Therapeutic activities help patients improve their muscular coordination.	.75403
25.	Therapeutic activities help patients improve their muscle strength.	.90837

Pearson correlations (Table 3.22) were computed for the three items.

Factor 4 items were thought to reflect the utility of therapeutic activities for physical dysfunctions. The factor was therefore called the "Therapy dimension" of therapeutic activities.



Table 3.22

Intercorrelation Matrix for Factor 4 Items (3)

		Items	
Items	20	24	25
20		.4761***	.5542***
24			.7470***
25			

\*\*\* P  $\leq$  .001.



### Factor 5

This factor consisted of only one item--item number 5. It had a factor loading of .60203, meaning that it strongly identified with that factor. The item is: Occupational therapists are too busy to accommodate therapeutic activities in their schedules.

In spite of the low value of sum of squares--1.09--and the percentage of variance--7.0 percent--this item loads heavily on the factor to be discarded as unimportant. The investigator contends that the item reflects a "time dimension" with reference to therapeutic activities. This could be justified by simple logic that occupational therapists holding favourable attitudes toward therapeutic activities would tend to use these activities more often than their colleagues possessing unfavourable attitudes.

It can be concluded at this point that the investigator attempted to explore the attitudes held by the Kenyan occupational therapists using the following dimensions:

1. A general evaluation dimension of therapeutic activities: The dimension attempted to explore how the participants of the study rated therapeutic activities;
2. Role of therapeutic activities toward occupational therapy uniqueness: The items comprising this dimension sought to explore the extent to which the participants thought of therapeutic activities as comprising the esoteric knowledge of occupational therapists;
3. The effects of therapeutic activities in patients: Are



therapeutic activities beneficial to the clients of occupational therapy? Or do the physically or psychosocially disabled accrue any benefits from participating in therapeutic activities settings?

4. Therapy dimension of therapeutic activities: This dimension is somewhat related to the third dimension. However, the specificity of the items comprising it dictated a separate dimension. The items with the highest factor loadings specifically relate to the improvement of muscular system, an area heavily dealt with in occupational therapy.
5. Time dimension: Considering that an occupational therapist has a plethora of treatment techniques at his/her disposal, the time that he/she devotes at a given technique is a good indication of his/her disposition toward that technique. Thus the time dimension is of utmost importance in exploring the attitudes of occupational therapists toward therapeutic activities.

The reader should note that the dimensions discussed above are not exhaustive in the exploration of attitudes of occupational therapists toward therapeutic activities. Nevertheless, the investigator is convinced that the five dimensions are salient to this investigation.



### Research Problem, Subproblems, and Null Hypotheses

In order to resolve the specific problem and the subproblems and to test the null hypotheses posed in Chapter I, a statistical analysis of the data was deemed necessary.

#### The Specific Problem

The specific problem of this study was to identify the attitudes that practising occupational therapists in Kenya have toward the use of therapeutic activities as a form of medical treatment for patients with physical and/or psychorocial dysfunctions.

A grand mean ( $G\bar{X}$ ) of the 30 items comprising Section C was computed to resolve this problem. Data in Table 3.13 show the grand mean of the 30 items.

#### The Subproblems

Five subproblems were incorporated in the study to investigate the existing relationship or differences between the attitudes possessed by occupational therapists and their demographic or background factors. The five subproblems were as follows.

##### The First Subproblem

The first subproblem was to determine if a relationship existed between the age of an occupational therapist and his/her attitude toward therapeutic activities as a form



of medical treatment.

Analysis. A Pearson r was computed for subproblem one. The correlation coefficient  $r = 0.33$  revealed a weak relationship between the age of an occupational therapist and his or her attitude toward therapeutic activities.

#### The Second Subproblem

The second subproblem was to determine if there was a difference in attitudes toward therapeutic activities as a form of medical treatment between male and female occupational therapists.

Analysis. Means and standard deviations for both male and female respondents were compared to answer subproblem two. See data in Table 3.23.

#### Subproblem Three

The third subproblem was to determine if a relationship existed between years of experience of an occupational therapist and his/her attitudes toward therapeutic activities as a form of medical treatment.

Analysis. A Pearson r was computed. The relationship between years of occupational therapy practice and attitudes of occupational therapists toward therapeutic activities was found to be positive but weak;  $r = 0.25$ .

#### Subproblem Four

The fourth subproblem was to identify the common roles assumed by occupational therapists practising in the Republic of Kenya.



Analysis. The roles were rank-ordered using the number of hours spent performing them. The roles were treatment, evaluation, administration supervision, clinical supervision, teaching, consultation, and research.

#### Subproblem Five

The fifth subproblem was to determine if there was a difference in attitudes toward therapeutic activities as a form of medical treatment between urban and rural occupational therapists.

Analysis. The mean scores of the thirty items comprising Section C of the research questionnaire were computed for rural and urban respondents. Data in Table 3.24 show that occupational therapists working in the rural areas of Kenya had a lower mean score-- $\bar{X} = 3.99$ --as compared to their urban counterparts-- $\bar{X} = 4.16$ .

#### The Null Hypotheses

The following null hypotheses were advanced in Chapter I. They were tested at the significance level of  $\alpha \leq 0.05$ . The results will be discussed fully in Chapter IV.

##### Null Hypothesis One ( $NH_1$ )

The first null hypothesis was that there would be no relationship between the age of an occupational therapist and his or her attitude toward therapeutic activities.

Analysis. The hypothesis was tested using the "statistical significance of sample relationship" (Popham, 1973, p. 23). A relationship of  $r = 0.33$  with a probability



Table 3.23

Mean Scores and Standard Deviations  
of Male and Female Respondents  
(Section C Items)

Sex	Number of Respondents	Mean	Standard Deviation
Male	29	4.17	0.55
Female	14	3.94	0.53

N = 43



of  $p = 0.015$  was computed (\*significant at  $p \leq 0.05$ ).

Null Hypothesis Two (NH<sub>2</sub>)

The second null hypothesis was that there would be no significant difference between the attitudes possessed by male and female occupational therapists toward therapeutic activities.

Analysis. A t-test was performed to test hypothesis NH<sub>2</sub> (see Table 3.25).

Null Hypothesis Three (NH<sub>3</sub>)

The third hypothesis was that there would be no relationship between the years of experience of an occupational therapist and his or her attitudes toward therapeutic activities.

Analysis. The statistical significance of the relationship  $r = 0.25$  was determined by examining the probability value computed for the relationship. In this case  $p = 0.049$  (\*significant at  $p \leq 0.05$ ).

Null Hypothesis Four (NH<sub>4</sub>)

The fourth hypothesis was that there would be no relationship between the perceived roles of an occupational therapist and his attitude toward therapeutic activities.

Analysis. Correlations between the perceived roles of an occupational therapist and his/her attitude toward therapeutic activities were computed. Data in Table 3.26 show the correlations and probabilities of these perceived roles.



Table 3.24

Mean Scores and Standard Deviations  
of Urban and Rural Respondents

(Section C Items)

Location	Number of Occupational Therapists	Mean	Standard Deviation
Urban	27	4.16	.46
Rural	16	3.99	.68

N = 43



Table 3.25

T-Test Analysis for Male and Female  
Occupational Therapists

Sex of Occupational Therapists	Number of Occupational Therapists	Mean Score	Standard Deviation	Df	t	2-Tail P
Male	29	4.17	0.55	41	1.28	0.20
Female	14	3.94	0.53			
N = 43						

\* Not significant at  $P \leq 0.05$ .



Table 3.26

## Pearson Correlation Coefficients and Probabilities of the Perceived Roles

Roles	Pearson Correlation Coefficient	Probability
Treatment	-0.02	0.44
Administration/Supervision	0.20	0.09
Teaching	0.08	0.28
Consultation	-0.22	0.07
Evaluation	-0.15	0.16
Clinical Supervision	0.09	0.47
Research	0.07	0.45

N = 43

\* Not significant at P ≤ 0.05.



Table 3.27  
T-Test Analysis for Urban and Rural  
Occupational Therapists

Location of Occupational Therapists	Number of Occupational Therapists	Mean	Standard Deviation	Df	t	2-Tail P
Urban	27	4.16	0.46	41	0.97	0.33
Rural	16	3.99	0.68			
N = 43						

\* Not Significant at  $P \leq 0.05$ .



### Null Hypothesis Five (NH<sub>5</sub>)

The fifth hypothesis was that there would be no significant difference between the attitudes possessed by urban and rural occupational therapists toward therapeutic activities.

Analysis. A t-test was performed to test the fifth null hypothesis (see Table 3.27).

### Validity and Reliability

Factor analysis was performed to improve the construct validity of Section C of the research instrument. The investigator, with recommendation from the thesis supervisor, consulted a factor analyst specialist from Education Research Services to ensure correct interpretation of the five dimensions.

To determine the reliability of the 30 items designed to measure the attitudes of occupational therapists, a split-half reliability test was performed using the odd-even procedure. A reliability coefficient of 0.91 was obtained.



## CHAPTER IV

### SUMMARY, FINDINGS, IMPLICATIONS, CONCLUSIONS, AND RECOMMENDATIONS

Included in the previous chapter was the analysis of the data generated by this study following the methodology that was prescribed in Chapter I.

In this fourth and final chapter of the thesis, a summary plus the findings of the research will be presented. Recommendations, implications, and conclusions drawn from the investigation will also be presented.

#### Summary

##### The Research Problem, Subproblems and Null Hypotheses

The specific problem of this study was to identify the attitudes of occupational therapists in the Republic of Kenya toward therapeutic activities.

In the endeavour to resolve the specific problem, five subproblems and null hypotheses were generated. The following were the research subproblems.

1. To determine if a relationship existed between the age of an occupational therapist and his/her attitude toward therapeutic activities as a form of medical treatment.
2. To determine if a relationship existed between years of



experience of an occupational therapist and his/her attitude toward therapeutic activities as a form of medical treatment.

3. To determine if there was a difference in attitudes toward therapeutic activities as a form of medical treatment between male and female occupational therapists.
4. To identify the common roles assumed by occupational therapists practising in the Republic of Kenya.
5. To determine if there was a difference in attitudes toward therapeutic activities as a form of medical treatment between urban and rural occupational therapists.

The following null hypotheses were tested:

$NH_1$ : There would be no relationship between the age of an occupational therapist and his/her attitude toward therapeutic activities.

$NH_2$ : There would be no significant difference between the attitudes possessed by male and female occupational therapists toward therapeutic activities.

$NH_3$ : There would be no relationship between the years of experience of an occupational therapist and his/her attitude toward therapeutic activities.

$NH_4$ : There would be no relationship between the perceived roles of an occupational therapist and his/her attitude toward therapeutic activities.



NH<sub>5</sub>: There would be no significant difference between the attitudes possessed by urban and rural occupational therapists toward therapeutic activities.

The data obtained through the research instrument were treated to statistical analysis to resolve the subproblems and test the hypotheses.

#### Related Literature

A review of the literature that was related to the topics of therapeutic activities, attitudes, and professionalism was presented in Chapter II. Several studies related to the present study were reviewed. A limited number of these studies were included in the content of the second chapter.

The main areas covered in the review of the literature were:

1. An historical survey of the use of therapeutic activities for treatment;
2. Training of occupational therapists for competency in therapeutic activities;
3. Abuse of therapeutic activities;
4. Attitudes;
5. Reactions toward therapeutic activities--positive and negative reactions;
6. Conceptualization of therapeutic activities and attitudes;
7. Professionalism in occupational therapy; and
8. Related studies.



### Instrumentation

A research questionnaire was developed by the investigator to collect the data for the study. It consisted of three sections. Section A allowed collection of the participants' demographic information, the types of disabilities treated by the participants, and the location of the hospitals where the participants worked. Section B sought to identify the roles that the participants perceived themselves as acting in, in a forty-hour work week. The last section, Section C, was designed to elicit reactions of participants to the statements directed toward therapeutic activities which would indicate the participants' attitudes toward these activities.

### Population

The population included all the 68 occupational therapists engaged in occupational therapy practice in the Republic of Kenya at the time of the study. Forty-three occupational therapists completed usable questionnaires to supply data for this study.

### Methodology

The methodology of the study involved contacting by telephone and mail the people who would assist the investigator in distributing the research questionnaire to the participants. Discussions were held with the Senior Deputy Director of Medical Services (Training) and the Senior



Occupational Therapist in the Republic of Kenya. It was agreed that the therapists in Kenya would form the population of this study and that these two officers would assist the investigator in every way possible to distribute, collect, and send the completed questionnaires back to the investigator.

The instrument that was designed for this study was critiqued by a panel of occupational therapists, analyzed by a specialist in instrument designing, and validated through a pilot study conducted by the investigator with occupational therapists working in hospitals and clinics in Edmonton. The final research instrument was dispatched to Nairobi for distribution in mid-June, 1980.

Forty-three usable questionnaires were returned. The data obtained were analyzed to answer the research questions.

#### Statistical Treatment

Three basic statistical procedures were used to analyze the data for this study: (a) a t-test was utilized to test for significant differences among male and female occupational therapists, and urban and rural occupational therapists; (b) measures of association between demographic factors, and perceived roles, and occupational therapists' attitudes were obtained by employing the Pearson product-moment correlation; and (c) responses to the 30 statements comprising section C of the research instrument were factor analyzed, factor loadings recorded, and intercorrelation



matrix for the five factors computed. The factor analysis of the statements was of an exploratory rather than a confirmatory analysis. The main objective was to find a simple but meaningful interpretation of the five factors.

### Findings

The findings of this study are based on the data that were collected and analyzed. A summation of the results of the research problems, subproblems, and null hypotheses will be presented in this section.

#### The Problem

The primary aim of this study was to identify the attitudes of occupational therapists toward therapeutic activities as a form of medical treatment.

The results of section C analysis revealed that occupational therapists working in the Republic of Kenya had a POSITIVE attitude toward therapeutic activities. Mean score for the 30 statements comprising section C = 4.10 with a standard deviation of 0.55.

#### The Subproblems

The first subproblem. The first subproblem was to determine if a relationship existed between the age of an occupational therapist and his/her attitude toward therapeutic activities as a form of medical treatment.

The results indicated a positive but weak relationship between the age of an occupational therapist and his/her



attitude toward therapeutic activities as a form of medical treatment. A correlation coefficient of  $r = 0.33$  was obtained.

The positive relationship meant that the older the occupational therapist, the higher the probability that he/she would possess positive attitudes toward therapeutic activities.

The second subproblem. The second subproblem was to determine if there was a difference in attitudes toward therapeutic activities as a form of medical treatment between male and female occupational therapists.

A comparison of the means obtained for male and female occupational therapists revealed that female occupational therapists had a lower mean score ( $\bar{X} = 3.94$ ) than their male counterparts ( $\bar{X} = 4.17$ ).

The mean scores indicated that male occupational therapists in the Republic of Kenya were more positively predisposed to therapeutic activities than their female counterparts. But because of the sample size difference (14 female occupational therapists and 29 male occupational therapists), this finding should be interpreted with discretion.

The third subproblem. The third subproblem was to determine if a relationship existed between years of experience of an occupational therapist and his/her attitudes toward therapeutic activities as a form of medical treatment.

The results revealed a positive but weak relationship ( $r = 0.25$ ). This meant that the more the number of



years of experience in occupational therapy practice, the higher the probability that the occupational therapist would have a positive attitude toward therapeutic activities.

The fourth subproblem. The fourth subproblem was to identify the common roles assumed by occupational therapists in the Republic of Kenya.

The results indicated that occupational therapists in the Republic of Kenya were engaged in the following roles (rank-ordered): treatment, evaluation, administration/supervision, clinical supervision, teaching, consultation, and research.

The fifth subproblem. The fifth subproblem was to determine if there was a difference in attitudes toward therapeutic activities as a form of medical treatment between urban and rural occupational therapists.

A comparison of the mean scores obtained for urban and rural occupational therapists revealed that therapists working in rural Kenya had a lower mean score ( $\bar{X} = 3.99$ ) as compared to their counterparts working in urban Kenya ( $\bar{X} = 4.16$ ). This finding indicates that the occupational therapists working in rural Kenya are not as positively predisposed toward therapeutic activities as their colleagues working in urban Kenya.



### The Null Hypotheses

NH<sub>1</sub>: The first null hypothesis stated that there would be no relationship between the age of an occupational therapist and his/her attitude toward therapeutic activities.

A correlation coefficient of  $r = 0.33$  with a probability of  $p = 0.015$  was obtained. The probability level was significant at  $p \leq 0.05$ . NH<sub>1</sub> was therefore REJECTED.

Rejection of NH<sub>1</sub> indicates that there is a relationship between the age of an occupational therapist and his/her attitude toward therapeutic activities.

NH<sub>2</sub>: The second null hypothesis was that there would be no significant difference between the attitudes possessed by male and female occupational therapists toward therapeutic activities.

The result of the t-test analysis showed that the difference was NOT STATISTICALLY SIGNIFICANT. NH<sub>2</sub> was, as a result, ACCEPTED.

Acceptance of NH<sub>2</sub> meant that the difference observed in the mean scores between male and female occupational therapists could have been a mere chance occurrence.

NH<sub>3</sub>: The third null hypothesis was that there would be no relationship between the years of experience of an occupational therapist and his or her attitudes toward therapeutic activities.

A correlation coefficient of  $r = 0.25$  with a probability of  $p = 0.049$  was obtained. This probability level



was significant at  $p \geq 0.05$ .  $NH_3$  was therefore REJECTED, meaning that there is a relationship between the years of experience of an occupational therapist and his/her attitude toward therapeutic activities.

$NH_4$ : The fourth null hypothesis was that there would be no relationship between the roles of an occupational therapist and his/her attitude toward therapeutic activities.

None of the relationships was significant at  $p \geq 0.05$ .  $NH_4$  was therefore ACCEPTED.

This meant that the attitudes of occupational therapists toward therapeutic activities were not a function of the roles that occupational therapists perceived themselves as performing.

$NH_5$ : The fifth null hypothesis was that there would be no significant difference between the attitudes possessed by urban and rural occupational therapists toward therapeutic activities.

The t-test analysis result showed NO SIGNIFICANT DIFFERENCE.  $NH_5$  was therefore ACCEPTED, meaning that the differences observed could only be attributed to chance.

### Conclusions

The following summary of conclusions are drawn from the above findings.

Occupational therapists in the Republic of Kenya possess a positive attitude toward therapeutic activities as



a medical treatment for the physically and/or psychosocially disabled.

There is a positive relationship between the age of an occupational therapist and his/her attitude toward therapeutic activities. Older occupational therapists exhibited a more positive attitude toward these activities than younger occupational therapists.

Male occupational therapists in the Republic of Kenya indicated a more positive attitude toward therapeutic activities than their female counterparts. It should, however be noted that the difference was not statistically significant.

The more experience an occupational therapist had in occupational therapy practice, the more positively predisposed he or she is to therapeutic activities.

The attitudes that an occupational therapist possessed toward therapeutic activities was not a function of his/her perceived role.

Occupational therapists working in the rural areas of Kenya indicated a positive attitude of a lesser magnitude toward therapeutic activities than their counterparts working in urban Kenya. The difference was not statistically significant.

Although the relationships between the roles of an occupational therapist and his/her attitude toward therapeutic activities were not statistically significant, one important observation should be pointed out:

The relationship between the attitude of an



occupational therapist and the roles of treatment, evaluation, and consultation were found to be negative. Thus, occupational therapists who spend most of their working time performing these roles are more likely to have negative attitudes toward therapeutic activities than those performing teaching, administration/supervision, clinical supervision, or research.

An explanation for the above finding is that occupational therapists who actually use therapeutic activities, especially those involved in treatment and evaluation, are more exposed to these activities to appreciate both their utility and limitations. On the other hand, those occupational therapists who function as administrators, teachers, clinical supervisors, or researchers are often far-removed from the clinical setups where therapeutic activities are administered.

The finding is further supported by the finding of this study that the older and more experienced an occupational therapist was, the higher the probability that he/she would possess a positive attitude toward therapeutic activities. Such older and more experienced occupational therapists are often the holders of administrative/supervisory, teaching, clinical supervisory, and/or research positions. So it is the younger occupational therapist who is more likely to do treatment, evaluation, and/or consultation. Hence the inverse relationship between these latter roles and the attitude of a therapist toward therapeutic activities.



### Implications

The finding that occupational therapists in the Republic of Kenya possess positive attitudes toward therapeutic activities has an important implication for all the constituencies of this young profession in this country.

The finding has the overriding implication that these therapists view themselves as independent professionals whose only ties with other allied paramedicals is of mutual cooperation from which patients may accrue numerous benefits. In displaying such a positive attitude toward therapeutic activities, occupational therapists are in essence telling doctors, nurses and others who tend to see them as a part of physiotherapy or vice versa that they are uniquely different. They use therapeutic activities, among other techniques, to accomplish their goals of treatment and/or rehabilitation.

### Recommendations

It is hoped that the findings of this investigation will create a general awareness, particularly on the part of occupational therapy educators, administrators, and practitioners, of the state of affairs concerning therapeutic activities in the Republic of Kenya. The investigator recommends that these constituencies of occupational therapy profession attend to the following.



Undertake a research study to investigate the attitudes of occupational therapy clientele toward therapeutic activities. By so doing, the occupational therapy practitioner will have a better basis to justify the need for therapeutic activities in treating patients who are physically or psychosocially dysfunctional.

The data analyzed are indicative of the significance that Kenyan occupational therapists place on therapeutic activities in the practice of their profession. In spite of this research finding, therapeutic activities suffer a serious disadvantage in the light of the contemporary view held by some academic leaders that "we must have a scientific justification for whatever we do." It is therefore highly recommended that the benefits accrued from therapeutic activities by the clientele of occupational therapy be justified through scientific methods. Preitz (1969) was of this opinion when he recommended:

That . . . studies be conducted to determine the therapeutic effect the more frequently used activities . . . have on the {physically and psychosocially disabled clients}. (p. 416)

With such an accomplishment, "activity selection could be placed on a more scientific . . . basis" (Preitz, p. 416).

The investigator recommends that the Ministry of Health in Kenya change its attitude toward the materials and equipment in occupational therapy. The Ministry of Health officials should view the materials and equipment needed in occupational therapy as a major part of treatment and/or rehabilitation process and accord them the necessary funding.



An occupational therapist without these materials and equipment is as helpless as a pharmacist without drugs or a surgeon without his/her surgical paraphernalia.

In view of the finding that occupational therapists in the Republic of Kenya hardly engaged in research, it is highly recommended that a course devoted to research methods be initiated immediately. This course should be designed to provide the occupational therapy student with basic skills, knowledge, and understanding of research methods that are used in the current research literature. This course should be taught in the last year of the diploma program. The already practising occupational therapists should also be provided with the opportunity to acquire these basic skills in research through inservice education.

The findings of this study indicate that both female and rural occupational therapists in Kenya possessed a lower attitudinal score than their male and urban counterparts. Although the differences were not statistically significant, the practical significance of these findings cannot be overlooked. The investigator therefore recommends that the Kenya Occupational Therapy Association conduct a detailed study to explore the underlying reasons for these differences in attitude toward therapeutic activities.

The apparent positive predisposition of occupational therapists in Kenya toward therapeutic activities can be interpreted to mean that these occupational therapists consider these activities as one of the cores of knowledge of the profession. From this finding, the investigator



recommends that occupational therapy educators determine the optimal depth for teaching therapeutic activities to occupational therapy students. The "use level" of skill is highly recommended as being optimal in depth. This level should replace the "appreciation level of skill" being taught today because the appreciation level is too parochial for teachers of the disabled (occupational therapists). It lacks the depth that is required in working with patients.

Literature on attitudes reveals that attitudes possessed by a person or a group of persons are continuously changing. It is hence recommended that studies such as this one be routinely conducted by the Kenya Occupational Therapists Association to monitor the attitudes of occupational therapists toward therapeutic activities.

A study directed at investigating whether occupational therapists are generally satisfied or dissatisfied with their jobs is recommended. Such a study could use the data obtained for this study to determine if a relationship exists between the nature of attitudes toward therapeutic activities and the level of a therapist's job satisfaction or dissatisfaction.

The research finding that there was a negative relationship between the treatment role of an occupational therapist and his/her attitude toward therapeutic activities calls for further investigation even though the relationship was not statistically significant. It must be fully ascertained that the relationship is either spurious or a matter



of chance happening (as is the case in this study), for a true negative relationship between the treatment role and an occupational therapist's attitude should be a matter of grave concern to all those who are dedicated to and concerned with the future of occupational therapy in Kenya.

The investigator recommends that the Kenya Occupational Therapy Association undertake a study to fully ascertain the relationship between the attitudes of an occupational therapist and his/her treatment role.

#### Observations

The following observations were made by the researcher in the course of conducting the various phases of this study.

It was observed that there was a higher number of male therapists than female therapists involved in the study. In Kenya, like other Third World Nations, occupational therapy is a male-dominated profession, more so than in industrialized nations where occupational therapy is female-dominated.

Another observation was that the education requirement prior to certification of occupational therapists in Kenya is still at the diploma level. It needs to be upgraded to a baccalaureate level to place these individuals on a professional qualification similar to their counterparts in developed nations, e.g. Canada and the United States of America.



In conducting this investigation, the researcher had reinforced the concept that therapeutic activities make the special body of knowledge that is unique to occupational therapy and that this unique body of knowledge forms the base for occupational therapy. This body of knowledge forms what scholars in the field of "professions and professionalism" call "esoteric knowledge" or what Gross, quoted in Vollmer and Mills (1966) called "wide knowledge of a specialized technique" (p. 9). Gross argued that for an occupation to be designated a profession, that occupation must possess a wide knowledge of a specialized technique, among other requirements. Occupational therapy seems to have attained this criterion of professionalism.



## BIBLIOGRAPHY

Ackley, N. The challenge of the sixties. Eleanor Clark Slagle Lectures - 1955 - 1972. Iowa: Kendal/Hunt Publishing Company, 1973.

Aranson, R. The role of an occupational therapist in a geriatric day hospital setting. American Journal of Occupational Therapy, 1974, 28(6), 290-292.

Bockoven, J.S. Occupational therapy, a historical perspective: legacy of moral treatment, 1800's to 1910. American Journal of Occupational Therapy, 1971, 25(5), 226-230.

Breer, P.E. and Locke, E.A. Task experience as a source of attitudes. Homewood, Illinois: Dorsey, 1965.

Brown, N.L. A study of health personnel's attitudes toward physicians' assistants in the State of New Jersey. Unpublished doctoral dissertation, Rutgers University, New Jersey, 1974.

Carlshausen, V.S. Motivation towards vocational rehabilitation. 6th International Congress, World Federation of Occupational Therapists. Vancouver: 1974.

Christiansen, C.H. Attitudes of graduates toward occupational therapy education. American Journal of Occupational Therapy, 1975, 29(6), 352-355.

Cunningham, M.E. Panel discussion of student training. Training for occupational therapy. Proceedings of the 4th International Congress World Federation of Occupational Therapists. London: 1966.

Cynkin, S. Occupational therapy: toward health through activities. Boston: Little, Brown and Company, 1979.

Dunton, W.R. Prescribing occupational therapy. Springfield, Illinois: Charles C. Thomas, 1947.

Edward, A.L. and Kenney, K.F.P. A comparison of Thurstone and Likert techniques of attitude scale construction. Journal of Applied Psychology, 1946, 30, 73-83.



- Etzioni, A. The semi-professions and their organization. New York: The Free Press, 1969.
- Fandetti, D.V. and Gelfand, D.E. Care of the aged: attitudes of white ethnic families. Gerontology, 1976, 16(6), 544-549.
- Fishbein, M. and Ajzen, I. Beliefs, attitude, intention and behaviour. An introduction to theory and research. Reading, Massachusetts: Addison-Wesley Publishing Company, 1975.
- Fishbein, M. Readings in attitude theory and measurement. New York: John Wiley and Sons, Inc., 1967.
- Freidson, E. Profession of medicine - a study of the sociology of applied knowledge. New York: Dodd, Mead and Company, 1970.
- Garfunkel, R. The reluctant therapists. Gerontologist, 1975, 15(2), 136-137.
- Getzels, J.W. and Guba, E.G. Social behaviour and the administrative process. School Review, 1957, 65, 423-441.
- Good, C.V. Dictionary of education. New York: McGraw Hill Book Company, 1959.
- Guilford, J.P. and Fruchter, B. Fundamental statistics in psychology. New York: McGraw-Hill Book Company, 1973.
- Hall, R.H. Organizations: structure and process. Englewood Cliffs, New Jersey: Prentice Hall, Inc., 1977.
- Hanson, D.J. and Blohm, E.R. Authoritarianism and attitudes toward mental patients. International Behavioral Scientist, 1974, 6(3), 57-60.
- Harworth, A.N. and McDonald, M.E. Theory of occupational therapy. Baltimore: The Williams and Wilkins Co., 1946.
- Hopkins, H.L., Smith, H.D. and Tiffany, E.G. The activity process. In H. Hopkins and H. Smith (Eds.), Willard and Spackman's occupational therapy (5th edition). New York: J.B. Lippincott Company, 1978.
- Hopkins, H.L. An historical perspective in occupational therapy. Willard and Spackman's occupational therapy (5th edition). New York: J.B. Lippincott Company, 1978.



- Hurd, S. Trends in treatment methods and media. British Journal of Occupational Therapy, 1958, 12(6), 48-52.
- Jantzen, A.C. Academic occupational therapy: 1973 Eleanor Clark Slagle lecture. American Journal of occupational therapy, 1958, 12(6), 314-329.
- \_\_\_\_\_. Proposed revision of the professional education of occupational therapists. American Journal of Occupational Therapy, 1958, 12(6), 314-329.
- Jones, E.E. and Gerald, H.B. Foundations of social psychology. New York: John Wiley and Sons, Inc., 1967.
- Katz, D. The functional approach to the study of attitudes. Public Opinion Quarterly, 1960, 168.
- Katz, D. and Scotland, E. A preliminary statement to a theory of attitude structure and change. In S. Koch (Ed.), Psychology: a study of science. New York: McGraw Hill Book Company, 1959.
- Krech, D.R. and others. Individual in society. New York: McGraw-Hill Book Company, 1962.
- Lemon, N. Attitudes and their measurement. New York: John Wiley and Sons, 1973.
- Lynn, K.S. The professions in America. Boston: The Riverside Press, Cambridge, 1965.
- McDonald, M.E. Occupational therapy in rehabilitation. London: Bailliere, Tindall and Cassell, 1970.
- \_\_\_\_\_. The process of education and training in occupational therapy. 5th International Congress of World Federation of Occupational Therapists, Zurich, 1970.
- Miller, D.B., Lowenstein, R. and Winston, R. Physicians' attitudes toward the ill, aged and nursing homes. Journal of the American Geriatric Society, 1976, 24(11), 498-505.
- Miskel, C.G. and Hoy, W.K. Educational administration: theory, research, and practice. New York: Random House, Inc., 1978.
- Mosey, A.C. Occupational therapy - a historical perspective: involvement in rehabilitation movements, 1942 - 1960. American Journal of Occupational Therapy, 1971, 25(3), 234-241.



Moshier, L.I. An investigation of the attitudes of child caregivers toward parent involvement in day care centres. Unpublished doctoral dissertation, George Peabody College, 1977.

Mumford, S.M. A comparison of interpersonal skills: verbal and activity groups. American Journal of Occupational Therapy, 24, 281-283.

Ngatia, P.M. A comparative survey of therapeutic activities used in physical occupational therapy departments in Edmonton, Alberta and Nairobi, Kenya. Unpublished major paper submitted to the Faculty of Rehabilitation Medicine. University of Alberta, Edmonton, 1979.

Nie, N.H., Hull, C.H., Jenkins, J.G., Steinbrenner, K., and Bent, D.H. Statistical package for social sciences. New York: McGraw Hill Book Company, 1975.

Nystrom, E.P. Activity patterns and leisure concepts among the elderly. American Journal of Occupational Therapy, 1974, 28(6), 337.

Ogunleye, P.A. Attitudes of occupational and physical therapists in Alberta. Unpublished M.Ed. thesis, University of Alberta, Edmonton, 1980.

O'Morrow, G.S. Administration of activity therapy service. Springfield, Illinois: Charles C. Thomas, 1966.

Oskamp, S. Attitudes and opinions. Englewood Cliffs, New Jersey: Prentice Hall, Inc., 1977.

Ostrom, T.M. Emergence of attitude theory: 1930-1950. In Anthony G. Greenwald, Timothy C. Brock, and Thomas M. Ostrom (Eds.), Psychological foundations of attitudes. New York: Academic Press, 1968.

O'Sullivan, E.N.M. Textbook of occupational therapy, with chief reference to psychological medicine. New York: Philosophical Library, Inc., 1955.

Palvolko, R.M. Sociology of occupations and professions. Illinois: F.E. Peacock Publishers, Inc., 1971.

Pattison, H.A. The trend of occupational therapy for tuberculosis. Archives of Occupational Therapy, 1922.

Perrow, C. Complex organizations: a critical essay. Illinois: Scott, Foresman and Company, 1979.

Popham, W.J. and Sirotnik, K.A. Educational statistics: use and interpretation. New York: Harper and Row, Publishers, 1973.



- Preitz, C.H. Goals and basic units of instruction for treatment media courses for the preparation of occupational therapists. Unpublished doctoral dissertation, Wayne State University, Detroit, Michigan, 1969.
- Reed, K. and Sanderson, S.R. Concepts of occupational therapy. Baltimore, London: Williams of Wilkins, 1980.
- Rockeach, M. Beliefs, attitudes and values: a theory of organization and change. San Francisco: Jossey-Bass, Inc., Publishers, 1968.
- Rosenberg, M.J. Attitude organization and change. New Haven: Yale University Press, 1960.
- Roy, I.H. The attitudes of student teachers toward their student teaching experience. Unpublished M.Ed. Thesis, University of Alberta, Edmonton, Alberta, 1972.
- Schein, E.H. Organizational psychology. Englewood Cliffs, New Jersey: Prentice Hall, Inc., 1972.
- Seiler, L.H. and Hough, R.L. Empirical comparisons of the Thurstone and Likert techniques. In Gene F. Summers (Ed.), Attitude Measurement. Chicago: Rand McNally and Company, 1970.
- Shalka, M.B. The attitudes of pupils, parents, teachers, and administrators toward corporal punishment in schools. Unpublished Masters Thesis, University of Alberta, Edmonton, Alberta, 1973.
- Shannon, P.D. The derailment of occupational therapy. American Journal of Occupational Therapy, 1977, 31(4), 229-234.
- Solveig, T. Occupational therapy training in Kenya. Proceedings of the International Congress, World Federation of Occupational Therapists, Israel, 1978.
- Task Force of the American Occupational Therapy Association. Professional reactivation in occupational therapy. Dubuque, Iowa: Kendall/Hunt Publishing Company, 1969.
- The American Association of School Administrators. Staff relations in school administration. Washington, D.C.: 1955.
- Thomas, C.L. Tabera cyclopedic medical dictionary. Philadelphia: F.A. Davis Company, 1962.



Thorndike, R.L. and Hagen, E. Measurement and evaluation  
In psychology and education. New York: John Wiley  
and Sons, Inc., 1969.

Thurstone, L.L. and Chave, E.J. The measurement of attitude.  
Chicago: University Press, 1929.

Triandis, H.C. Attitude and attitude change. New York:  
John Wiley and Sons, Inc., 1971.

Tuckman, B.W. Conducting educational research. New York:  
Harcourt Brace Jovanovich, Inc., 1978.

University of Alberta. Occupational therapy prospectus.  
Edmonton; University of Alberta Press, 1978.

Vollmer, H.M. and Mills, L. Professionalization. New  
Jersey: Prentice Hall, Inc., 1966.

Woodside, H.T. The development of occupational therapy,  
1910 - 1929. American Journal of Occupational  
Therapy, 1971, 25(5), 226-230.



## APPENDIX A

Initial Research Questionnaire  
- Used in Pilot Study



QUESTIONNAIRESECTION A

Please place a check mark (✓) in the appropriate box:

1. Sex: Male:

Female:

2. Age:

20 years or less

39-44 years

21-26 years

45-50 years

27-32 years

51-56 years

33-38 years

57 years and over

3. Years of experience in occupational therapy practice:

1 year or less

10-11 years

2-3 years

12-13 years

4-5 years

14-15 years

6-7 years

16-17 years

8-9 years

18 years and over

4. Location of the hospital where you work:

Urban

Rural

Psychiatric disabilities

Physical disabilities

Paediatric disabilities



**SECTION B**

Estimate the number of hours you spend per 40 hour work week on each of the duties listed below. Please place a check mark (✓) in the appropriate box.



SECTION C

This section consists of a number of statements. Following each statement is a series of choices shown below:

Strongly Agree  
Agree  
Undecided  
Disagree  
Strongly Disagree

To respond to each statement you are to read each statement and select from the five choices the one that you agree or disagree with and place a check mark (✓) in the appropriate box.

Example

Medical doctors should be the unquestioned leaders of occupational therapy.

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
		✓		

In this example the participant was undecided whether or not medical doctors should be the leaders of occupational therapy.

Turn to the next page and start responding to the statements.

Please RESPOND TO ALL STATEMENTS.



	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					

1. Occupational therapists are too busy to accommodate therapeutic activities in their schedules.
2. Therapeutic activities are unique tools for occupational therapists.
3. An occupational therapist can operate optimally without any knowledge of therapeutic activities.
4. Working with therapeutic activities makes me feel small among fellow medical workers.
5. I find therapeutic activities very enjoyable.
6. Other medical workers do not think much of occupational therapy.
7. Involvement in therapeutic activity programs hastens patients' discharge from hospital.
8. Use of therapeutic activities is a subtle exploitation of patients.
9. An occupational therapist should be competent in a wide range of therapeutic activities.
10. Therapeutic activities are of very little help to the patients.
11. If therapeutic activities must be done in occupational therapy, they should be done by a junior cadre of OTS, eg. OT assistants.
12. Too much time of an occupational therapist is spent in performing therapeutic activities.
13. A lot of money is spent on buying materials and equipment for therapeutic activities.
14. Therapeutic activities should only serve as alternatives to the highly developed therapeutic techniques.
15. Therapeutic activities are busy work and should be substituted immediately.



16. Therapeutic activities definitely make patients feel better.
17. It is only through therapeutic activities that patients can best recognize their problems.
18. If I had a choice, I would never use therapeutic activities.
19. More patients are accepting therapeutic activities as a vital treatment media.
20. Therapeutic activities have more advantages than disadvantages.
21. The affluent society needs drugs and sophisticated medical equipment for treatment and not simple therapeutic activities.
22. Occupational therapists should deemphasize therapeutic activities.
23. Interpersonal relationships of withdrawn patients can be improved through the use of therapeutic activities.
24. Therapeutic activities should be dropped first if for any reason a subject was to be dropped from the occupational therapy curricula.
25. Activities are a source of frustration and feelings of inferiority for the less able patients.
26. Total acceptance of therapeutic activities as the only treatment procedure has confined occupational therapy to a very narrow theoretical base.
27. Inspite of criticisms from other medical personnel, I still believe in therapeutic activities.
28. Therapeutic activities channel feelings of aggression into productive expressions.

	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					



29. I don't know what I would do if I did not have a battery of therapeutic activities to use in the treatment of patients.
30. The very best method to evaluate work tolerance for the disabled is through the use of therapeutic activities.
31. Taking courses in therapeutic activities is a waste of time and energy on the part of occupational therapy students.
32. Most therapeutic activities taught in OT are menial and therefore not appropriate for people from high social economic status.
33. When done in the wards, therapeutic activities are embarrassing to the occupational therapist.
34. Therapeutic activities are sex stereotyped.
35. More research in occupational therapy should be geared toward justification of therapeutic activities.
36. I feel fairly confident in administering therapeutic activities.
37. Therapeutic activities done in occupational therapy are obsolete and do not seem to change with the advancing technology.
38. Use of therapeutic activities lowers the status of the occupational therapy profession.
39. Other therapeutic techniques should only be used to complement therapeutic activities.
40. Successful completion of tasks (therapeutic activities) brings pleasurable feelings to patients, which is non-existent in other medical areas.
41. Therapeutic activities have to be blamed for the lack of recognition suffered by occupational therapists.

	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
29.					
30.					
31.					
32.					
33.					
34.					
35.					
36.					
37.					
38.					
39.					
40.					
41.					



42. I choose therapeutic activities for my treatment goals after I have completely exhausted all other means of treatment.
43. Therapeutic activities help patients improve their muscular coordination.
44. Joint-range of motion can still be increased and/or maintained without employment of therapeutic activities.
45. Therapeutic activities introduce patients to an environment almost similar to the one outside the hospital setting.
46. Therapeutic activities help patients improve their muscle strength.
47. Therapeutic activities alone cannot improve a patient's hand dexterity.
48. Local arts and crafts cannot be utilized therapeutically in occupational therapy.
49. I would be extremely happy to see more money spent on materials and equipment for therapeutic activities.
50. The tremendous amount of time spent in preparing occupational therapy students in therapeutic activities should be cut down to half.
51. Participation in therapeutic activities influences patients' state of mental health.
52. Therapeutic activities are the best predictors of the future work performance of the physically or mentally disabled clients.
53. Considering that most of an occupational therapist's time is spent in learning and performing therapeutic activities, I would not recommend the profession to students of high ability.

	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
42.					
43.					
44.					
45.					
46.					
47.					
48.					
49.					
50.					
51.					
52.					
53.					



## APPENDIX B

### Sample Letter of Transmittal



FACULTY OF EDUCATION  
DEPARTMENT OF INDUSTRIAL AND  
VOCATIONAL EDUCATION  
TELEPHONE (403) 432-3678



THE UNIVERSITY OF ALBERTA  
EDMONTON, ALBERTA, CANADA  
T6G 2G5

May 28, 1980

Dear Occupational Therapist,

I am an occupational therapist wishing to determine the attitudes of occupational therapists in Kenya toward therapeutic activities. My study is titled "Attitudes of Occupational Therapists Toward Therapeutic Activities." Because of your experience in occupational therapy, you have been selected to participate in the pilot study to pre-test the research instrument.

You were selected to participate in this pilot because of your experience with occupational therapy treatment modalities. Your participation will make a significant contribution toward the final form of the research questionnaire before it is used in the final phase of the research. Your constructive criticisms as to the design of the instrument, sequence of statements on the questionnaire, phrasing of the statements, would be most welcome. It would also be appreciated if you could give me a minimum and a maximum time that it took you to complete the questionnaire.

Your responses are regarded as confidential and will be used for statistical purposes only. They will not be released in any way that will allow them to be identified with you or your institution. There are NO WRONG OR RIGHT ANSWERS. Your honesty and fairness in responding to the items will be a great asset to the whole study.

Because of time line I have established for the study, I am requesting that you return the completed instrument to me by June 10th, 1980. To do so please use the enclosed self addressed stamped envelope. I will be glad to send a copy of the pilot study results to those interested respondents.

I look forward to receive your cooperation. Thank you.

Your Professional Colleague,

Peter Muchiri Ngatia



## APPENDIX C

Cover Sheet for the Questionnaire



COVER SHEET FOR  
THE QUESTIONNAIRE

Occupational therapy is a medical discipline which utilizes work, recreational activity, and self-help activity for the distinct purpose of contributing to and hastening recovery from disease and injury (Harworth and McDonald, 1949, p. 1). A combination of these activities is what this study is all about. They will be referred to as therapeutic activities henceforth.

Occupational therapists' feelings toward these activities as their media of treatment is not readily expressed. The subject appears to be treated with tacit approval and/or disapproval. Hence, individual occupational therapists have chosen to keep emotions concerning pleasant or unpleasant feelings towards therapeutic activities to themselves. This study will attempt to elicit these unspoken feelings.

The specific problem of this study is to identify the attitudes that practising occupational therapists in Kenya have toward the use of therapeutic activities as a form of medical treatment for patients suffering from either physical and/or psychosocial dysfunctions.

The attached questionnaire is the instrument of this study. It deals with various aspects of occupational therapy practice and training. It consists of three discrete sections. Section A is designed to seek information about you, the institution in which you work, and the kind of patients and/or clients you frequently attend to. In Section B is a list of duties that an occupational therapist is often called upon to perform. You are asked to indicate the number of hours per work week which you devote to the



duties. The last section (Section C) consists of fifty-three statements derived from the literature of occupational therapy and other research studies that are related to this one. You are asked to respond to each statement by indicating your level of agreement or disagreement. The whole questionnaire will take you a maximum time of ten to fifteen minutes.

Thank You!

You can now proceed. Respond to all sections and all items.

Good Luck!



## APPENDIX D

### The Final Research Questionnaire



# **The Attitudes of Occupational Therapists Toward Therapeutic Activities**

**BY:**

**PETER MUCHIRI L. NGATIA  
DEPT. OF INDUSTRIAL AND  
VOCATIONAL EDUCATION  
UNIVERSITY OF ALBERTA  
EDMONTON, ALBERTA.  
CANADA.**



QUESTIONNAIRESECTION A

OFFICE  
USE  
ONLY

Please place a check mark (✓) in the appropriate box:

1. Sex:      Male       Female
2. Age:
 

20 years or less	<input type="checkbox"/>	39 - 44 years	<input type="checkbox"/>
21 - 26 years	<input type="checkbox"/>	45 - 50 years	<input type="checkbox"/>
27 - 32 years	<input type="checkbox"/>	51 - 56 years	<input type="checkbox"/>
33 - 38 years	<input type="checkbox"/>	57 years & over	<input type="checkbox"/>
3. Years of experience in occupational therapy practice:
 

1 year or less	<input type="checkbox"/>	10 - 11 years	<input type="checkbox"/>
2 - 3 years	<input type="checkbox"/>	12 - 13 years	<input type="checkbox"/>
4 - 5 years	<input type="checkbox"/>	14 - 15 years	<input type="checkbox"/>
6 - 7 years	<input type="checkbox"/>	16 - 17 years	<input type="checkbox"/>
8 - 9 years	<input type="checkbox"/>	18 years & over	<input type="checkbox"/>
4. Location of the hospital where you work:
 

Urban	<input type="checkbox"/>	Rural	<input type="checkbox"/>
-------	--------------------------	-------	--------------------------
5. Rank order the following:
 

Assign a 3 to the kind of disability you attend to most frequently;  
   assign a 2 to one you attend to less frequently; and  
   assign a 1 to the kind of disability you rarely attend to.

Psychiatric disabilities	<input type="checkbox"/>
Physical disabilities	<input type="checkbox"/>
Pediatric disabilities	<input type="checkbox"/>



SECTION B

Estimate the number of hours you spend per 40 hour work week on each of the duties listed below.

Please place a check mark (✓) in the appropriate box.



SECTION C

This section consists of a number of statements. Following each statement is a series of choices shown below:

Strongly Agree  
Agree  
Undecided  
Disagree  
Strongly Disagree

To respond to each statement, you are to read each statement and select from the five choices the one that you agree or disagree with, and place a check mark (✓) in the appropriate box.

EXAMPLE:

Medical doctors should be the unquestioned leaders of occupational therapy

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
		✓		

In the above example, the participant was undecided as to whether or not doctors should be the leaders of occupational therapy.

The statements are contained on the following pages.

PLEASE RESPOND TO ALL STATEMENTS



SECTION C

1. Occupational therapists are too busy to accommodate therapeutic activities in their schedules.
2. Therapeutic activities are unique tools for occupational therapists.
3. An occupational therapist can operate optimally without any knowledge of therapeutic activities.
4. I find therapeutic activities very enjoyable.
5. Involvement in therapeutic activity programmes hastens patient's discharge from hospital.
6. Use of therapeutic activities is a subtle exploitation of patients.
7. An occupational therapist should be competent in a wide range of therapeutic activities.
8. Therapeutic activities are of very little help to the patients.
9. Therapeutic activities are busy work and should be substituted immediately.
10. If I had a choice, I would never use therapeutic activities.
11. Therapeutic activities have more advantages than disadvantages.
12. The affluent society needs drugs and sophisticated medical equipment for treatment and not simple therapeutic activities.

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	OFFICE USE ONLY



SECTION C

13. Occupational therapists should de-emphasize therapeutic activities.
14. Interpersonal relationships of withdrawn patients can be improved through the use of therapeutic activities.
15. Therapeutic activities should be dropped first if for any reason a subject was to be dropped from the occupational therapy curriculum.
16. The very best method to evaluate work tolerance for the disabled is through the use of therapeutic activities.
17. Taking courses in therapeutic activities is a waste of time and energy on the part of occupational therapy students.
18. Most therapeutic activities taught in occupational therapy are menial and therefore not appropriate for people from high social economic status.
19. More research in occupational therapy should be geared toward justification of therapeutic activities.
20. I feel fairly confident in administering therapeutic activities.
21. Use of therapeutic activities lowers the status of the occupational therapy profession.
22. Successful completion of tasks (therapeutic activities) brings pleasurable feelings to patients, which is non-existent in other medical areas.

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	OFFICE USE ONLY



SECTION C

	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	OFFICE USE ONLY

23. I choose therapeutic activities for my treatment goals after I have completely exhausted all other means of treatment.
24. Therapeutic activities help patients improve their muscular coordination.
25. Therapeutic activities help patients improve their muscle strength.
26. Local arts and crafts cannot be utilized therapeutically in occupational therapy.
27. Participation in therapeutic activities influence the patient's state of mental health.
28. Therapeutic activities are best predictors of the future work performance of the physically or mentally disabled clients.
29. Considering that most of an occupational therapist's time is spent in learning and performing therapeutic activities, I would not recommend the profession to students of high ability.
30. Inspite of criticism from other medical personnel, I still believe in therapeutic activities.

THANKYOU FOR YOUR PARTICIPATION IN COMPLETING THIS QUESTIONNAIRE.



## APPENDIX E

### Sample Letter of Transmittal



FACULTY OF EDUCATION  
DEPARTMENT OF INDUSTRIAL AND  
VOCATIONAL EDUCATION  
TELEPHONE (403) 432-3678



THE UNIVERSITY OF ALBERTA  
EDMONTON, ALBERTA, CANADA  
T6G 2G5

July 7, 1980

Dear Colleague

I am presently pursuing a Master's degree in Industrial and Vocational Education (The University of Alberta). In partial fulfillment of the requirements of this degree, I have elected to do a research project which is entitled, "Attitudes of Occupational Therapists Toward Therapeutic Activities." You have been chosen to participate in this study.

You were selected to participate in this study because of your extensive experience with therapeutic activities and occupational therapy. Your participation will contribute significantly toward the study which may consequently lead to a better understanding of therapeutic activities and their utility in occupational therapy.

The questionnaire attached is designed to elicit your reaction to the statements listed in the next few pages. There are NO "right" or "wrong" answers. DO NOT IDENTIFY YOURSELF. Your answers will be confidential and will only be published in a summary form. Total honesty and fairness in responding to the statements will be a great asset to this study.

I will be very grateful if you would complete this questionnaire and forward it to the address below for delivery. Prompt delivery depends on your immediate response and will enhance the delivery scheduled for 31st August, 1980. Return the completed questionnaire to:

Fatma Mkeel  
Senior Occupational Therapist  
Medical Training Centre  
P.O. Box 30195  
Nairobi

O R

Alfred Mutema  
Occupational Therapy Lecturer  
Medical Training Centre  
P.O. Box 30195  
Nairobi

I will send a summary of the questionnaire results to the secretary of our association (KOTA) for publication. Your unfailing cooperation is greatly appreciated.

Yours sincerely



**APPENDIX F**

**Cover Sheet for the Final Research  
Questionnaire**



ATTITUDES OF OCCUPATIONAL THERAPISTS  
TOWARD THERAPEUTIC ACTIVITIES

In this study, "therapeutic activities" will be used to mean any exertion of energy that involves use of materials, tools and/or equipment in a particular direction with the aim of curing or at least contributing to the cure, alleviation of disease and/or rehabilitation and habilitation of a patient who is physically and/or psychosocially dysfunctional.

Occupational therapists' feelings toward these activities as their media of treatment is not readily expressed. The subject appears to be treated with tacit approval and/or disapproval. Hence, individual occupational therapists have chosen to keep emotions concerning pleasant or unpleasant feelings towards therapeutic activities to themselves. This study will attempt to elicit these unspoken feelings.

The specific problem of this study is to identify the attitudes that practicing occupational therapists in Kenya have toward the use of therapeutic activities as a form of medical treatment for patients suffering from either physical and/or psychosocial dysfunctions.

The attached questionnaire is the instrument of this study. It deals with various aspects of occupational therapy practice and training. It consists of three discrete sections. Section A is designed to seek information about you, the institution in which you work, and the kind of patients and/or clients you frequently attend to. In Section B is a list of duties that an occupational therapist is often called upon to perform. You are asked to indicate the number of hours per work week which you devote to the duties. The last section (Section C), consists of 30 statements derived from the literature of occupational therapy and other research studies that are related to this one. You are asked to respond to each statement by indicating your level of agreement or disagreement. The whole questionnaire will take you a maximum of 10 to 15 minutes.

THANK YOU!

You can now proceed. Respond to ALL sections and ALL items.

GOOD LUCK!



## APPENDIX G

Letter to the Senior Deputy Director  
of Medical Services



Unit 606C, Michener Park  
Edmonton, Alberta, Canada  
T6H 5A1

7th July, 1980

Dr. M. R. Migue  
Principal and Deputy Director  
of Medical Services  
Medical Training Centre  
P.O. Box 30195  
Nairobi

Re P/No 152103

Dear Sir

I wish to inform you that I have today dispatched some questionnaires to Ms. Fatma McKeel for distribution to all occupational therapists in the Republic of Kenya. These questionnaires are the instruments for the study I am undertaking for the partial fulfillment of the requirements of the Master's degree in Industrial and Vocational Education. The study is entitled, "The Attitudes of Occupational Therapists Toward Therapeutic Activities."

The research dictation and necessity that I get responses from all occupational therapists makes this project quite expensive and unaffordable to me. I am therefore requesting your support of this project, financial and otherwise, to enhance the distribution and consequently the rate of return. The more questionnaires I get back, the more representative the sample of study will be, and the more generalizable, true and practical the results of the study will be. I sincerely trust that you will do everything to make this project a total success.

Enclosed please find a copy of the questionnaire.

Thank you.

Yours faithfully

Peter M. L. Ngatia

PMLN:cg  
Encl.



## APPENDIX H

Letter to the Senior Occupational Therapist



Unit 606C, Michener Park  
Edmonton, Alberta, Canada  
T6H 5A1

7th July, 1980

Ms. Fatma McKeel  
Senior Occupational Therapist  
Medical Training Centre  
P.O. Box 30195  
Nairobi

Re P/No 152103

Dear Madam

Thank you very much for your letter of 9th May, 1980. I was pleased to learn that 'you at the training' will do your level best to help distribute the questionnaires to the occupational therapists.

Your comments about the rate of return were highly appreciated. However, I would like to add that a rate of 50 percent return would be extremely good in a randomly sampled group. For a total population (occupational therapists in Kenya) like the one I am dealing with in this study, returns of 80 percent and even more are required depending on the importance and the sensitivity of the topic under study. A study dealing with attitudes of occupational therapists toward therapeutic activities can be viewed as a very sensitive one. It was with this view in mind that I emphasized (and I still do), that I get responses from ALL QUALIFIED occupational therapists working in the Republic of Kenya. It would, of course, be naive on my part to expect a 100 percent return.

I have requested the principal, Dr. M. R. Migue, to avail his support, financial and otherwise, to enhance the distribution.

I have mailed (under separate cover) this date, 70 questionnaires to you for distribution.

I am looking forward to having the occupational therapists' total cooperation in this study. Thank you for your assistance and please convey our greetings to all.

Yours faithfully

Peter M. L. Ngatia



## APPENDIX I

Follow-Up Letter to the  
Participants of the Study



FACULTY OF EDUCATION  
DEPARTMENT OF INDUSTRIAL AND  
VOCATIONAL EDUCATION  
TELEPHONE (403) 432-3678



THE UNIVERSITY OF ALBERTA  
EDMONTON, ALBERTA, CANADA  
T6G 2G5

30.10.80

Dear Occupational Therapist:

About three months ago, I sent you a research questionnaire to complete and return to me. To this date the return has been satisfactory, but due to the nature of this study, a higher rate of return is necessary before commencing the data analysis. I am therefore requesting you to send your completed questionnaires as soon as possible.

In the event that you have misplaced the original questionnaire, I have enclosed another. Please complete it and return to Ms. Fatma McKeel for delivery.

If you have already completed and returned the questionnaire, please ignore this letter. I thank you again for your cooperation.

Yours sincerely,

Peter M. Ngatia

PMN/jl  
Encl.









**B30319**